U.S. Army Center for Health Promotion and Preventive Medicine

U

S

TRAINING MUNITIONS HEALTH RISK
ASSESSMENT
NO. 39-EJ-1485-00
RESIDENTIAL EXPOSURE FROM INHALATION OF
AIR EMISSIONS FROM THE
M200 5.56-MM BLANK CARTRIDGE
DEPARTMENT OF DEFENSE IDENTIFICATION CODE: A080



C

Prepared by:

Environmental Health Risk Assessment Program

H

Prepared for:

U.S. Army Environmental Center

P

Published date:

15 June 2001

P

Approved for public release; distribution unlimited

M

20011218 133

Readiness Thru Health

U.S. Army Center for Health Promotion and Preventive Medicine

The lineage of the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) can be traced back over 50 years. This organization began as the U.S. Army Industrial Hygiene Laboratory, established during the industrial buildup for World War II, under the direct supervision of the Army Surgeon General. Its original location was at the Johns Hopkins School of Hygiene and Public Health. Its mission was to conduct occupational health surveys and investigations within the Department of Defense's (DOD's) industrial production base. It was staffed with three personnel and had a limited annual operating budget of three thousand dollars.

Most recently, it became internationally known as the U.S. Army Environmental Hygiene Agency (AEHA). Its mission expanded to support worldwide preventive medicine programs of the Army, DOD, and other Federal agencies as directed by the Army Medical Command or the Office of The Surgeon General, through consultations, support services, investigations, on-site visits, and training.

On 1 August 1994, AEHA was redesignated the U.S. Army Center for Health Promotion and Preventive Medicine with a provisional status and a commanding general officer. On 1 October 1995, the nonprovisional status was approved with a mission of providing preventive medicine and health promotion leadership, direction, and services for America's Army.

The organization's quest has always been one of excellence and the provision of quality service. Today, its goal is to be an established world-class center of excellence for achieving and maintaining a fit, healthy, and ready force. To achieve that end, the CHPPM holds firmly to its values which are steeped in rich military heritage:

- ★ Integrity is the foundation
 - ★ Excellence is the standard
 - ★ Customer satisfaction is the focus
 - ★ Its people are the most valued resource
 - ★ Continuous quality improvement is the pathway

This organization stands on the threshold of even greater challenges and responsibilities. It has been reorganized and reengineered to support the Army of the future. The CHPPM now has three direct support activities located in Fort Meade, Maryland; Fort McPherson, Georgia; and Fitzsimons Army Medical Center, Aurora, Colorado; to provide responsive regional health promotion and preventive medicine support across the U.S. There are also two CHPPM overseas commands in Landstuhl, Germany and Camp Zama, Japan who contribute to the success of CHPPM's increasing global mission. As CHPPM moves into the 21st Century, new programs relating to fitness, health promotion, wellness, and disease surveillance are being added. As always, CHPPM stands firm in its commitment to Army readiness. It is an organization proud of its fine history, yet equally excited about its challenging future.

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

The public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS. 3. DATES COVERED (From - To) 2. REPORT TYPE 1. REPORT DATE (DD-MM-YYYY) March 1999-August 2001 06-15-2001 Technical Report 5a. CONTRACT NUMBER 4. TITLE AND SUBTITLE Training Munitions Health Risk Assessment No.39-EJ-1485-00 Residential Exposure from Inhalation of the Air Emissions from the M200 5.56mm Blank Cartridge, Department of Defessise Identification Code: A080 5b. GRANT NUMBER 5c. PROGRAM ELEMENT NUMBER 5d. PROJECT NUMBER 6. AUTHOR(S) Joleen Mobley, Stafford D.F.R.Coakley 5e. TASK NUMBER 5f. WORK UNIT NUMBER 8. PERFORMING ORGANIZATION 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) REPORT NUMBER U.S. Army Center for Health Promotion and Preventive Medicine 5158 Blackhawk Road Risk Assessment # 39-EJ-1485-00 Aberdeen Proving Ground, Maryland 21010-5422 10. SPONSOR/MONITOR'S ACRONYM(S) 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) **USAEC** U.S. Army Environmental Center ATTN: SFIM-AEC-PC Aberdeen Proving Ground, MD 21010-5401 11. SPONSOR/MONITOR'S REPORT NUMBER(S) SFIM-AEC-PC-CR-200150 12. DISTRIBUTION/AVAILABILITY STATEMENT Distribution Unlimited 13. SUPPLEMENTARY NOTES Point of Contact: Tamera Rush 410-436-6849 14. ABSTRACT This assessment evaluated the potential for human health effects to offsite residents breathing air emissions following use of the 5.56mm Blank Cartridge. This document present the evaluation of the potential for adverse human health effects to teh offsite residents breathing air emissions following the use of military firing ranges during training exercises. Study results showed no protential for health risks to the hypothetical resident from inhalation of air emissions from the 5.56mm Cartridge. To conduct this study, air emissions from the 5.56mm Cartridge were collected in a test chamber (at Aberdeen Test Center, Aberdeen, MD). This information was then used in an air dispersion model to determine ambient air concentrations at a location downwind from the site where the item was activated. Modeled air concentrations were combined with exposure information to estimate the amount of substances the hypothetical resident breathes. This intake was combined with the substance's health information, to determine if there is a potential for health risks from inhjalation of these substances. The health risk included both long-term and short term exposures to the modeled substance concentrations. Study results showed no potential for helath risks from inhalation of air emissions from the 5.56mm Blank Cartridge. 15. SUBJECT TERMS emissions, aberdeen test center, characterization, health risk, munitions, firing point 17. LIMITATION OF 18. NUMBER 119a. NAME OF RESPONSIBLE PERSON 16. SECURITY CLASSIFICATION OF: OF Tamera Rush **ABSTRACT** a. REPORT | b. ABSTRACT | c. THIS PAGE **PAGES** 19b. TELEPHONE NUMBER (Include area code) U U U UU

410-436-6849



DEPARTMENT OF THE ARMY

U.S. ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE 5158 BLACKHAWK ROAD ABERDEEN PROVING GROUND, MARYLAND 21010-5403

MCHB-TS-EHR

TRAINING MUNITIONS HEALTH RISK ASSESSMENT NO. 39-EJ-1485-00 RESIDENTIAL EXPOSURE FROM INHALATION OF AIR EMISSIONS FROM THE M200 5.56-MM BLANK CARTRIDGE

EXECUTIVE SUMMARY

This assessment evaluated the potential for human health effects to offsite residents breathing air emissions following use of the M200 5.56-mm Blank Cartridge (M200) on firing ranges during training exercises.

To conduct this assessment, air emissions from the M200 were collected in a test chamber at the U.S. Army Aberdeen Test Center, Maryland. The data collected from the Firing Point Emission Study provided the amount and types of substances released from the M200. This information was then used in an air dispersion model to determine ambient air concentrations at locations downwind from the M200 firing location. Since the training facility in this assessment is hypothetical, the air model used assumptions that provided conservative estimates of air concentrations.

Modeled air concentrations were combined with exposure information (e.g., number of cartridges used per year) to estimate the amount of each substance the hypothetical offsite resident breathes. This estimate was then compared with the substance's health information, which was obtained from agencies such as the U.S. Environmental Protection Agency, to determine if there is a potential for health risks from inhalation.

The health risk assessment included both long-term (30 years) and short-term (15-minute or 1-hour) exposures to modeled substance concentrations. Assessment results, generated using conservative methods, showed that the hypothetical offsite resident breathing air as close as 200 meters (656 feet) from the M200 firing location is safe from these emissions. At locations where offsite residents are located less than 200 meters from the M200 firing locations, a more site-specific evaluation is recommended. It should be noted that at most training installations, training areas are over 1,000 meters (over half a mile) away from populated areas.

TABLE OF CONTENTS

1.	. PURPOSE	1
2.	. AUTHORITY	1
3.	REFERENCES	1
4.	. BACKGROUND	1
	4.1 CARTRIDGES AND THEIR USE	1
	4.2 WHAT IS THE M200?	1
	4.3 USE OF THE M200	1
	4.4 ASSESSMENT SUMMARY	2
5.	DATA COLLECTION AND AIR MODELING	3
	5.1 EMISSION FACTORS	3
	5.2 BACKGROUND AND DESCRIPTION	3
	5.3 MODEL ASSUMPTIONS	3
	5.4 GENERAL METHODOLOGY	5
	5.5 USE OF MODEL OUTPUT	5
	5.6 DETERMINATION OF SUBSTANCE-SPECIFIC EMISSION RATES	5
6.	RISK ASSESSMENT	7
	6.1 EXPOSURE ASSUMPTIONS	7
	6.2 TIME-AVERAGING	7
	6.3 TOXICITY ASSESSMENT	10
7.	RISK CHARACTERIZATION	14
	7.1 CHRONIC HEALTH RISK	14
	7.2 ACUTE HEALTH RISK	15
	7.3 FACT SHEET	15
8.	UNCERTAINTY DISCUSSION	15
9.	CONCLUSION	18
10	RECOMMENDATIONS	18
11	POINT OF CONTACT	18

LIST OF APPENDICES

REFERENCES	APPENDIX A
AIR DISPERSION MODELING OUTPUT DATA	APPENDIX E
HEALTH-BASED SCREENING LEVELS	
AND ACUTE TOXICITY VALUES	APPENDIX C
RISK ASSESSMENT DATA	APPENDIX D
FACT SHEET SUBMITTED TO THE U.S. ARMY ENVIRONMENTAL	
CENTER	APPENDIX E
LIST OF TABLES	
TABLE 1 – SOURCE PARAMETERS	4
TABLE 2 – WORST-CASE METEOROLOGICAL PARAMETERS	5
TABLE 3 – AIR MODEL INPUT PARAMETERS	5
TABLE 4 – FREQUENCY OF USE FOR THE M200	7
TABLE 5 – EXPOSURE PARAMETERS USED TO DETERMINE	
TIME-AVERAGED CHRONIC AIR CONCENTRATIONS	8
TABLE 6 – SUMMARY OF RfCs USED FOR PETROLEUM	
HYDROCARBONS	12
TABLE 7- TYPES OF UNCERTAINTY	16

LIST OF ACRONYMS

AEC U.S. Army Environmental Center

AEGL Acute Exposure Guideline Levels

AIHA American Industrial Hygiene Association

Al Aluminum

ATC U.S. Army Aberdeen Test Center

ATSDR Agency for Toxic Substances and Disease Registry

ATV Acute Toxicity Value

CO₂ Carbon Dioxide

DODIC Department of Defense Identification Code

DOE U.S. Department of Energy

EPA U.S. Environmental Protection Agency

ERPG Emergency Response Planning Guidelines

HBSL Health-Based Screening Level

INPUFF Integrated PUFF Model

NAAQS National Ambient Air Quality Standards

NEW Net Explosive Weight

OEL Occupational Exposure Limit

PM₁₀ Particulate Matter under 10 microns in size

PRG Preliminary Remediation Goals

RBC Risk-Based Concentration

RfC Reference Concentration

TEEL Temporary Emergency Exposure Limits

TPH Total Petroleum Hydrocarbons

TSP Total Suspended Particulates

USACHPPM U.S. Army Center for Health Promotion and Preventive Medicine

TRAINING MUNITIONS HEALTH RISK ASSESSMENT NO. 39-EJ-1485-00 RESIDENTIAL EXPOSURE FROM INHALATION OF AIR EMISSIONS FROM THE M200 5.56-MM BLANK CARTRIDGE

1. PURPOSE

This document presents the assessment of the potential for human health effects to offsite residents breathing air emissions following use of the M200 5.56-mm Blank Cartridge (M200) on firing ranges during training exercises.

2. AUTHORITY

Memorandum, U.S. Army Environmental Center, 4 June 1999, Subject: Pyrotechnics Risk Assessment.

3. REFERENCES

See Appendix A for a list of references.

4. BACKGROUND

4.1 CARTRIDGES AND THEIR USE

Cartridges are cases that contain a primer, propelling charge, and projectile. The primer is needed to activate the propelling charge, which provides the force to send the projectile to a target. Examples of projectiles include bullets, rockets, and missiles. Cartridges are also referred to as "rounds" and are fired from weapons such as pistols or rifles.

4.2 WHAT IS THE M200?

The M200 is a blank cartridge used only in training. It has no projectile and is used to simulate firing in training exercises and for saluting purposes. The M200 can be identified by its crimped closure at the violet-colored cartridge tip (Reference 1). Each M200 cartridge is about the length of a man's thumb.

The M200 consists of a metal case containing mostly copper and zinc. The propelling charge is made up primarily of nitrocellulose and nitroglycerin. Nitrocellulose is commonly used in furniture lacquers, printing inks, nail polish, and as a primary ingredient in smokeless propellants for military and commercial use. Nitroglycerin is a component in dynamite and is used for military and industrial purposes such as mining and demolition.

4.3 USE OF THE M200

The M200 is used with the M16 series rifles. To use the M200, a device is attached to the muzzle of the rifle allowing for firing with blank ammunition. Firing with

blank ammunition allows soldiers to safely simulate combat and practice using rifles. The M200 is commonly used in ceremonies for saluting, such as the 21-gun salute at military funerals (Reference 2).

4.4 ASSESSMENT SUMMARY

The general assessment approach consisted of two main parts: air dispersion modeling and exposure assessment, which are briefly discussed in the paragraphs below. Sections 5 through 7 present a discussion of the methodology used for this assessment.

Emissions data used in the air dispersion modeling were obtained from the Firing Point Emission Study, conducted by the U.S. Army Aberdeen Test Center (ATC), at Aberdeen Proving Ground, Maryland (Reference 3). This study was funded by the U.S. Army Environmental Center (AEC) with the purpose of identifying and quantifying emissions from weapons firing. Data from this study were generated by firing munitions in a test chamber using weapons that are representative of those used by the U.S. Army during training. Emissions data for the M200 were generated by firing it from the M16A1 rifle.

The emissions data for the M200 were used with an atmospheric dispersion model to estimate the average concentrations that might be experienced by an offsite resident. Since this assessment is designed to provide results that would be applicable to most Army training facilities, the training area used in this assessment was a hypothetical one. While most training areas are at least 1,000 meters away from populated areas, as a conservative distance, it was initially assumed that a person could reside 100 meters downwind from the firing point (location where the rifle is positioned). In addition, air-modeling parameters were selected to mimic worst-case conditions.

The exposure assessment included calculations of time-averaged concentrations for both long-term (chronic) and short-term (acute) exposures. For the purpose of this assessment, air concentrations were averaged over 30 years for chronic exposures and 1-hour or 15 minutes for acute exposures. Using a screening approach, a substance's estimated time-averaged air concentration was then compared to chronic health-based screening levels (HBSLs) established by the U.S. Environmental Protection Agency (EPA) or acute toxicity values (ATVs) established by selected agencies depending on the exposure duration (i.e., 30 years versus 1-hour or 15 minutes). The comparison was made using the ratio of the HBSL or ATV to the estimated air concentration for each of the substances evaluated. If this ratio was less than one, no further evaluation was needed. This approach is conservative because the exposure assumptions used by the agencies, to establish HBSLs and ATVs, are likely to overestimate the exposures experienced by offsite residents living near firing ranges. If the chronic or acute averaged concentrations (Cchronic and Cacute) were greater than the screening levels, producing a ratio greater than one, further evaluation would be warranted to determine the potential for health effects. Note that concentrations greater than the screening levels do not indicate an onset of health effects, but rather, the potential for such.

5. DATA COLLECTION AND AIR MODELING

5.1 EMISSION FACTORS

Emission factors, used to derive the air modeling emission rates used in this assessment, were generated from the Firing Point Emission Study conducted by the ATC (Reference 3). The data provided by the ATC included the net explosive weight (NEW), the substances sampled, and substance-specific emission factors. Emissions data from the Firing Point Emission Study are included in the first five columns of the table located in Appendix B.

5.2 BACKGROUND AND DESCRIPTION

Air dispersion models are available to mathematically simulate plume behavior and to estimate downwind concentrations of substances emitted from various sources. However, specific models are not available to determine the dispersion of emissions from munitions used during training. Estimating the magnitude and location of these concentrations depends on many factors including the amount and type of emissions, the behavior of the source, and meteorological conditions. Since a specific model is not available for modeling the use of munitions during training, the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) evaluated numerous air models to determine which would be suitable for use with munitions used during training. The USACHPPM recommended using the Integrated PUFF (INPUFF) model to estimate the dispersion of emissions from various munitions sources (Reference 4).

The INPUFF Model (Reference 5) was developed to simulate dispersion from instantaneous or semi-continuous point sources. This Gaussian-integrated puff model is capable of addressing a cloud type release over short periods of time, and computations can be performed for a single point source for multiple receptors. The algorithms used to calculate concentrations assume a vertically uniform wind direction (with no chemical reaction) to compute the contribution of each cloud at a receptor for each time step/interval.

5.3 MODEL ASSUMPTIONS

Some assumptions were made to best represent the firing of the M200 cartridges. These assumptions were as follows:

Typically, with conventional point sources (such as incinerators), the cloud rise and formation are determined by characterizing flue gas exit velocity, temperature, and stack diameter. However, the M200 cartridges are used in conjunction with the M16 series rifles. For unconventional sources with no real physical stack dimensions, such as rifles, the stack height and diameter were assumed to be equal to the height of the barrel and the bore diameter. No exit velocity was used with this source because the emissions rates generated from the test data were obtained from sampling a stabilized cloud with no exit velocity. Table 1 includes the source parameters used to model the M200 cartridges.

TABLE 1: SOURCE PARAMETERS

Parameter	Input Value
Source/Stack Diameter	0.00556 meters
Source/Stack Height	1 meter
Source Exit Temperature	298.15 degrees Kelvin (°K) (or 77 °F)
Exit Velocity	0 meters/second
Initial horizontal dispersion coefficient (σ_y)	0.96 meters
Initial vertical dispersion coefficient (σ_z)	1.07 meters

- ▶ Initial cloud dimensions are preferred to model the air emissions from these types of releases. The dimensions are used to define the initial horizontal and vertical dispersion values (σ_y and σ_z) of the released cloud. This information was not measured during the studies at the ATC; therefore, the cloud dimensions were based on the test chamber dimensions and the volume of air sampled. By assuming an elliptical cloud with the prevailing wind direction being perpendicular to the rifle muzzle when fired, the test chambers radius would be equal to the initial vertical dispersion (σ_z), and the initial horizontal dispersion (σ_y), would be equal to one half the length of the test chamber. The cloud exit temperature was assumed to be equal to the test chamber temperature.
- For the purposes of this assessment, a hypothetical offsite resident was assumed to be located first at 100 meters, then at 200 meters directly downwind from the source. The meander of the cloud is a major factor when estimating concentrations at given locations downwind from the source. Assuming that the resident is directly downwind from the source is the same as assuming that there is no cloud meander and the center of the cloud migrates directly over the hypothetical offsite resident. This assumption provides the most conservative modeled concentrations.
- Since this assessment does not look at a specific training site, generic, worst-case meteorological data were used. To determine the worst-case meteorological conditions that would result in the highest air emission concentrations, the modeling was performed using the EPA Risk Management Program Guidance (Reference 6). This guidance includes tables for estimating the footprint of chemical releases and is intended to inform emergency responders of potential accidental releases. The EPA has defined most default conditions for meteorological modeling parameters. Table 2 lists the meteorological parameters that were used in the air model.

TABLE 2: WORST-CASE METEOROLOGICAL PARAMETERS

Parameter	Input Value
Wind Speed	1 meter/second
Atmospheric Stability	Category F
Wind Direction	270°
Ambient Temperature	293 degrees Kelvin (°K) (or 68 °F)

5.4 GENERAL METHODOLOGY

The model was run for a total calculation time of 200 seconds for the 100-meter location and 400 seconds for the 200-meter location. This was done to simulate a single round being fired and to ensure that the total mass of the cloud had passed the hypothetical resident locations. Concentrations were calculated every 2 or 4 seconds, depending on the location being modeled. The model results indicated that the initial cloud reached the hypothetical offsite resident at 200 meters within 160 seconds and dissipated below the lowest concentration the model calculated, which in this instance $(1 \times 10^{-12} \, \text{g/m}^3)$ occurred within 267 seconds. Table 3 contains the air model input parameters used in this assessment.

TABLE 3: AIR MODEL INPUT PARAMETERS

Parameter	Inpu	t Value
rafailletei	100 meters	200 meters
Number of meteorological periods (NTIME)		1
Duration of each meteorological period (ITIME)	200 seconds	/400 seconds
Number of updates to the source (NSRCDS)	1	00
Duration/time step between each source update (ISUPDT)	2 seconds	s/4 seconds
Total time modeled/Simulation Period (NTIME) (ITIME)= (NSRCDS) (ISUPDT)	200 seconds	s/400 seconds

5.5 USE OF MODEL OUTPUT

The concentrations provided by the INPUFF model were based on a unit emission rate of 1 gram/second from an emission source, and did not represent any substance-specific concentrations from the use of any weapons system. This unit emission rate is typically used for ease of modeling purposes. The relationship between the emission rate and predicted concentration is linear. Therefore, the ratio of the predicted concentration to the unit emission rate was multiplied by each substance-specific emission rate to provide substance-specific concentrations.

5.6 DETERMINATION OF SUBSTANCE-SPECIFIC EMISSION RATES

The actual substance emission rate for one item (ER₁) for each substance was calculated using Equation 1. Example 1 contains a sample calculation using this equation.

$$ER_1 = \frac{EF \cdot CV}{t}$$
 Equation 1

Where:

 ER_1 = emission rate for one item (g/sec)

EF = average adjusted emission factor (lb/item)

CV = conversion factor (453.59 g/lb)

t = release duration as obtained from the INPUFF model (sec)

Example 1

Sample Calculation Using Equation 1:

$$ER_1 = \frac{(2.25 E - 04) (453.59)}{(4)} \times 1 \text{ item}$$

= 2.557 E-02 g/sec

Calculation provided for Carbon Dioxide (CO₂) at the 200-meter location. Appendix B provides the averaged adjusted emission factor of CO₂ in lb/item.

Substance-specific ambient concentrations for one item (CONC) were calculated using Equation 2. A sample calculation using this equation is provided in Example 2. Appendix B contains estimated air concentrations for both the 100 and 200-meter locations.

$$CONC = ER_1 \cdot \frac{UC}{ER_{unit}}$$
 Equation 2

Where:

CONC = substance concentration based on one item (g/m³)

 ER_1 = emission rate for one item (g/sec)

 ER_{unit} = unit emission rate as used in the model (g/sec)

UC = concentration based on the unit emission rate (g/m³)

Example 2
Sample Calculation Using Equation 2:

$$CONC = (2.557E - 02) \frac{(7.778E - 05)}{(1)}$$

 $= 1.989E-06 g/m^3$

Calculation provided for CO₂ at 200-meter location.

6. RISK ASSESSMENT

6.1 EXPOSURE ASSUMPTIONS

Exposure assumptions were selected using a typical use scenario for the M200 during training exercises. The typical use scenario was provided by the AEC and is based on consultation with their senior training advisor (References 7, 8). The frequency of use for the M200 was required to determine how much substance an offsite resident would be exposed to in the time period of interest (i.e., acute or chronic exposure). Table 4 summarizes the general use scenario for the M200.

TABLE 4: FREQUENCY OF USE FOR THE M200

Parameter	Value Used
Number of cartridges used per year	1,089,120
Maximum number of cartridges used in 1-hour	1,000

6.2 TIME-AVERAGING

For the chronic assessment, time-averaged concentrations were calculated by assuming that the hypothetical resident would be exposed for 30 years. This is consistent with the exposure duration used by the EPA, which assumes that the resident spends 30 years at the same residence. By using the same exposure duration, the estimated time-averaged concentrations could be compared with their respective HBSLs, which are derived using standard EPA default assumptions.

Using the default residence time established by the EPA, the assumption was made that someone could be exposed to air emissions from 1,089,120 cartridges per year for 30 years. Table 5 lists the exposure parameters used to estimate concentrations for the chronic assessment. These parameters are based on the typical use scenario provided by AEC (Table 4) and the assumptions used in the air model run.

TABLE 5: EXPOSURE PARAMETERS USED TO DETERMINE TIME-AVERAGED CHRONIC AIR CONCENTRATIONS

Evenous Possessor	Valu	e Used
Exposure Parameter	100 meters	200 meters
Exposure Time (ET _{ctg})	3.333 min/cartridge ¹	6.667 min/cartridge ¹
Exposure Frequency (EF _{ctg})	1,089,120 cartridges/year	1,089,120 cartridges/year
Exposure Duration (ED)	30 years ²	30 years ²

¹Based on the total model time of 200 seconds (3.33 minutes) and 400 seconds (6.67 minutes) used in the air model run.

Chronic averaged concentrations were calculated using Equation 3. Example 3 shows how this calculation was performed using the total suspended particulates (TSP) concentration at 200 meters as an example. As indicated in Appendix C, TSP is noncarcinogenic, therefore, the averaging time is the same as the exposure duration.

$$C_{chronic} = \frac{CONC \cdot 10^6 \cdot ET_{ctg} \cdot EF_{ctg} \cdot ED}{525,600 \cdot AT}$$
 Equation 3

Where:

 $C_{chronic}$ = average chronic concentration ($\mu g/m^3$)

CONC = average modeled concentration for one cartridge (g/m³)

10⁶ = unit conversion (μ g/g)

 ET_{ctg} = exposure time per cartridge (minutes/cartridge)

 EF_{ctg} = exposure frequency (cartridges/year)

ED = exposure duration (years)

525,600 = unit conversion (minutes/year)

AT = averaging time (years)

(carcinogenic endpoint: AT = 70 years noncarcinogenic endpoint: AT = ED)

²EPA default value.

Example 3 Sample Calculation Using Equation 3:

$$C_{chronic(TSP)} = \frac{(6.652\text{E} - 08)(10^6)(6.667)(1,089,120)(30)}{(525,600)(30)}$$

 $= 9.19E-01 \mu g/m^3$

Appendix B provides the average modeled concentration for one cartridge (CONC). Table 5 includes the exposure parameters.

Unlike the chronic assessment, only limited guidance for evaluating acute exposures is currently available. Since many cartridges may be fired in a short period of time, however, acute exposures cannot be overlooked. For the purpose of this assessment, acute exposure is defined as a 1-hour or 15-minute exposure. The 1-hour or 15-minute acute exposure averaging times allow for comparison with guidelines developed specifically for emergency planning purposes (see discussion on acute toxicity below).

The exposure frequency is based on the number of cartridges used per 1-hour or 15 minutes depending on the guideline used for comparison. This information is based on the use scenario provided in Table 4. To estimate air concentrations for potential acute health effects, it was conservatively assumed that 1,000 M200s are fired in one hour. The average acute concentrations were computed using Equation 4. Example 4 contains a sample calculation at 200 meters using this equation. Since TSP does not have an ATV, aluminum (AI) is used as the example substance.

$$C_{acute} = \frac{CONC \cdot 10^6 \cdot ET_{ctg} \cdot EF_{ctg}}{60}$$
 Equation 4

Where:

 C_{acute} = average acute concentration ($\mu g/m^3$)

CONC = average modeled concentration for one cartridge (g/m³)

 10^6 = unit conversion (µg/g)

ET_{ctq} = exposure time per cartridge (minutes/cartridge)

EF_{cta} = exposure frequency (cartridges/hour)*

= unit conversion (minutes/hour)

* Based on 1-hour or 15 minute (0.25 hour) ATV

Example 4 Sample Calculation Using Equation 4:

$$C_{acute(Al)} = \frac{(1.711E - 09)(10^6)(6.667)(1000 / 0.25)}{60}$$
$$= 7.60E-01 \,\mu\text{g/m}^3$$

Appendix B provides the average modeled concentration for one cartridge (CONC) for Al. See Appendix C to determine the ATV used.

6.3 TOXICITY ASSESSMENT

The potential for health effects was determined by comparing time-averaged air concentrations to HBSLs, which are developed from a substance's known toxicity. These toxicity values typically include different levels of safety factors depending on the level of confidence of the critical study. Appendix C contains a table of screening toxicity values used for the chronic and acute assessments.

6.3.1 CHRONIC ASSESSMENT

The chronic assessment was conducted using a screening approach. Using this method, a substance's estimated time-averaged air concentration was compared to its HBSL. If this ratio was less than one, no further analysis was required. This approach is conservative because the exposure assumptions used by the EPA, to establish HBSLs, assume that the resident is continuously exposed for 350 days per year (assuming 2 weeks vacation per year). In contrast, exposure to air emissions from actual training activities at a firing range is intermittent and isn't likely to occur on a daily basis year round.

A hierarchy of sources was developed for selection of the HBSLs to quantitatively evaluate as many of the identified substances as possible. The hierarchy of sources used was as follows:

- Clean Air Act, EPA National Ambient Air Quality Standards (NAAQS) (Reference 11)
- > EPA Region 9 Preliminary Remediation Goals (PRGs) (Reference 10)
- ➤ EPA Region 3 Risk-Based Concentrations (RBCs) (Reference 9)

Some substances have neither PRGs nor RBCs because they have their own set of regulatory standards. Under the Clean Air Act, the EPA is required to establish NAAQS for several substances considered harmful to public health and the environment. Currently, NAAQS are available for seven substances. The NAAQS for the longer averaging time were used for the chronic assessment. Depending on the

substance, this can range from an 8-hour average to an annual average. In addition, since the majority of the measured TSP was PM_{10} (particulate matter under 10 microns in size) (Reference 3), the NAAQS for PM_{10} was used to evaluate the potential for health effects from exposure to TSP.

Next on the hierarchy, after the NAAQS, are the EPA Region 9 PRGs and the EPA Region 3 RBCs. Since the methodology used by EPA Region 9 to develop the PRGs generally results in lower values than the EPA Region 3 RBCs, the PRGs were first on the hierarchy of sources. RBCs were used when a PRG was not available. To ensure that the most recent information was used, the Internet sites of both EPA Regions were checked. The HBSLs used for this assessment are presented in Appendix C.

Although the general approach used by both EPA Region 3 and Region 9 is the same, the exposure assumptions differ enough so that final recommended values can vary to a certain degree. In both methods, a substance's screening concentration was selected using the toxicity endpoint that derives a lower concentration. For example, if a substance has a known systemic toxicity and is a carcinogen, the screening concentration was calculated using both toxicity values. To maintain a conservative approach, EPA then selected the lower screening concentration as the recommended PRG or RBC.

Example 5 shows a sample calculation of how a substance's estimated chronic concentration is compared to its HBSL using the TSP concentration at 200 meters as an example.

Example 5 Sample Calculation Comparing a Substance's Estimated Chronic Concentration to Its HBSL:

$$\frac{C_{chronic(TSP)}}{HBSL} = \frac{9.19E - 01}{5.00E + 01}$$
$$= 1.84E - 02 < 1$$

In this case, the resulting ratio is less than one, indicating further evaluation is not necessary.

Many petroleum hydrocarbons were detected but do not have specific screening levels. Therefore, the approach recommended by the Total Petroleum Hydrocarbon Criteria Working Group (Reference 13) was adopted to evaluate petroleum hydrocarbon mixtures. Based on the working group's assessment of various hydrocarbons, it was recommended that mixtures be separated according to a substance's number of carbons and its chemical class (i.e., aliphatic or aromatic¹).

¹ Aliphatic hydrocarbons are hydrocarbons in which the carbon atoms are joined by single covalent bonds consisting of two shared electrons (e.g., butane). Aromatic hydrocarbons have ring structures (e.g., benzene) (Reference 14).

Generally, as a substance's carbon number increases, its molecular weight increases, and it is, therefore, not a substance of concern via inhalation. The working group also concluded that aromatic hydrocarbons tend to be more toxic than aliphatic hydrocarbons (Reference 13). Table 6 tabulates the inhalation toxicity values used to evaluate exposure to petroleum mixtures. To be consistent with the methodology used in this assessment, the reference concentrations (RfCs) were converted to PRGs using Region 9 exposure assumptions. The resulting PRGs were used as the HBSLs for the petroleum hydrocarbons in this assessment. These values are presented in Appendix D.

TABLE 6: SUMMARY OF RfCs USED FOR PETROLEUM HYDROCARBONS1

Carbon Range	Aromatic Inhalation RfC (mg/m³)	Aliphatic Inhalation RfC (mg/m³)
C ₅ – C ₆ C _{>6} – C ₈		18.4
C>7 - C8	0.4	6. V 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
$C_{>8} - C_{10}$ $C_{>10} - C_{12}$ $C_{>12} - C_{16}$	0.2	1.0
C _{>16} – C ₂₁ C _{>21} – C ₃₅	NA	NA

Reference 14

NA = not applicable for high molecular weight TPHs (C_{>16}) because substances in this carbon range are not volatile and therefore, inhalation is not a pathway of concern.

6.3.2 ACUTE ASSESSMENT

An established method for assessing acute health effects is not currently available. In 1995 the EPA recognized the need for acute exposure guidelines for emergency response purposes and created the National Advisory Committee for Acute Exposure Guideline Levels (AEGLs) for Hazardous Substances. Currently, AEGLs are available for only a few substances.

To overcome the absence of acute toxicity data for the purposes of human health risk assessment, several state regulatory agencies have suggested that guidelines developed for emergency purposes be used in the interim. Although suggestions have been made to use occupational exposure limits (OELs) by applying additional safety factors (References 15, 16), OELs were not used in this assessment because they introduce even more uncertainty than the use of emergency guidelines. The OELs are designed to protect the workplace environment, and assume 8 hours a day, 5 days a week exposures. By definition, these exposures are more chronic than acute.

In comparison, emergency planning guidelines are more appropriate because they are typically developed for exposures of 1-hour or less. In addition, safety

factors are included as part of the guideline development so that the values would be protective of the general population.

Emergency Response Planning Guidelines (ERPGs) published by the American Industrial Hygiene Association (AIHA) (Reference 17) and the Temporary Emergency Exposure Limits (TEELs) developed by the U.S. Department of Energy (DOE) (Reference 18) were used for this assessment, specifically the ERPG-1s and the TEEL-1s. Since TEEL-1s are intended for exposures up to 15-minutes, air concentrations compared to TEELs were averaged over a 15-minute period. Air concentrations compared to ERPGs and AEGLs were averaged over 1-hour, as these values are intended for 1-hour exposures.

For this assessment, the hierarchy of sources for ATV selection was as follows with each ATV defined below:

- ➤ EPA AEGL-1. "AEGL-1 is the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic, nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure."
- ➤ AIHA ERPG-1. "The maximum concentration in air below which it is believed nearly all individuals could be exposed for up to 1- hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor."
- ➤ DOE TEEL-1. "The maximum concentration in air below which it is believed nearly all individuals could be exposed without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor."

AEGLs were used first when available since they are developed specifically for the purpose of acute exposure assessments. The ERPGs were selected next, prior to a substance's TEEL, because they are vigorously reviewed before they are published whereas the TEELs are not.

Example 6 shows a sample calculation of how a substance's estimated acute concentration was compared to its ATV using aluminum concentration at 200 meters as an example.

Example 6

Sample Calculation of Comparing a Substance's Estimated Acute Concentration to Its ATV:

$$\frac{C_{acute(AI)}}{ATV} = \frac{7.60E - 01}{3.00E + 04}$$
$$= 2.53E - 05 < 1$$

In this example with AI, the ratio is less than one, indicating that further analysis is not necessary.

7. RISK CHARACTERIZATION

As previously described, the exposure assessment included calculations of time-averaged concentrations for both long-term (chronic) and short-term (acute) exposures. Using a screening approach, a substance's estimated time-averaged air concentration was then compared to HBSLs or ATVs. The comparison was made using the ratio of the HBSL or ATV to the estimated concentration. This approach is conservative because the exposure assumptions used by the agencies, to establish HBSLs and ATVs, are likely to overestimate the exposures experienced by offsite residents living near firing ranges.

If this ratio was less than one, no further evaluation was needed. If the chronic or acute averaged concentrations (C_{chronic} and C_{acute}) were greater than the screening levels, resulting in a ratio greater than one, further evaluation would be warranted to determine the potential for health effects. Note that concentrations greater than the screening levels do not indicate an onset of health effects, but rather, the potential for such.

The chronic and acute assessments were conducted as outlined in Section 6.3. Appendix D presents results from the M200 risk characterization.

7.1 CHRONIC HEALTH RISK

The assessment at the 100-meter downwind hypothetical resident location, indicated that the level of acrolein from the M200 emissions was greater than the screening level. The ratios of all other substances to their HBSLs were below one. Estimated concentrations were remodeled to a distance 200-meters downwind from the firing location. The results showed that at 200 meters the estimated concentration of acrolein had decreased to a safe level. The estimated concentrations for all other substances were further reduced with all ratios below one.

The ratio of estimated acrolein concentrations to the HBSL was 1.74 at the 100-meter location. Acrolein is formed when fats are heated and fuels are burned. It is commonly found in diesel exhaust and smoke from forest fires (Reference 19). Acrolein is classified as a noncarcinogen and the chronic HBSL (EPA Region 9 PRG) is based

on animal testing data (Reference 11). Acrolein is not expected to persist in the environment and its transport is limited because it is reactive and relatively unstable in the atmosphere (Reference 19). The half-life for acrolein in ambient air is 15-20 hours.

7.2 ACUTE HEALTH RISK

For the acute assessment, all ratios were below one at the 100-meter location, indicating that no acute health effects are expected from breathing the air emissions from the M200. However, air concentrations were modeled at the 200-meter location for consistency with the chronic assessment. Estimated concentrations at the 200-meter location were even lower than at 100-meters. Since all ratios for the acute assessment were below one, no further assessment was needed.

7.3 FACT SHEET

Appendix E includes a copy of the fact sheet submitted to the AEC. The fact sheet used results from this assessment to address health concerns related to inhalation of M200 air emissions.

8 UNCERTAINTY DISCUSSION

The limitations inherent in modeling and the added conservatism of the assessment contribute to the uncertainty of the assessment results. The risk assessment methodology typically includes safety factors that are embedded in the toxicity data to ensure adequate protection of the general population, particularly, susceptible individuals such as the sick, elderly, and children. Table 7 identifies areas of uncertainty associated with this assessment.

TABLE 7: TYPES OF UNCERTAINTY

Issue	Uncertainty	Direction of Effect
	Emissions Modeling	
Modeled versus real- time sampling	The air concentrations in this assessment were modeled. Actual air concentrations taken from the field may be higher or lower.	Varies
Frequency of use for the M200	Actual frequency of use for these munitions during training exercises may be different from those stated in this report.	Varies
Hypothetical resident assumed to be located directly downwind	Unless the area around the training facility is populated, the chances that a person living directly downwind is low.	Overestimates
Use of worst-case meteorological conditions	To ensure that this assessment is applicable to most training areas, worst-case meteorological conditions were used in the air model.	Overestimates
	Exposure Assessment	
Estimating time- averaged concentrations	Actual exposure from the M200 is intermittent. If one were to plot a person's exposure profile, the plot would consist of a series of spikes. Since current risk assessment methodology does not allow the assessment of the potential for health risks as a function of time, a single concentration, averaged over the exposure duration was used. In this assessment, the exposure durations used were 30 years and 1-hour or 15 minutes.	Varies
Comparing estimated concentration to established screening levels	The Region 3 and Region 9 HBSLs were developed assuming that the resident is exposed 350 days per year. It is unlikely for training with the M200 to occur for 350 days per year at a particular firing range.	Overestimates
Comparing estimated concentrations to established screening levels	Comparison to screening levels does not account for possible cumulative effects of exposure to more than one substance.	Underestimates
Screening assessment versus calculating an average daily intake	Calculating an average daily intake allows the use of scenario-specific assumptions. However, unless the ratio of concentration to screening level	Varies

TABLE 7: TYPES OF UNCERTAINTY

Issue	Uncertainty	Direction of Effect
	approaches one, a screening assessment is useful as a first-cut evaluation.	
Exposure to other munitions	Other munitions are typically used during the same training exercise. These items may contain similar or different substances from those detected in the M200.	Underestimates
	Toxicity Assessment	
Lack of toxicity data	Some substances were not quantitatively evaluated because they have no known toxicity data.	Underestimates
Modifying and uncertainty factors for toxicity data	Modifying factors and uncertainty factors of varying degree are typically applied to toxicological values. These factors are used to conservatively account for extrapolating from animal studies for human health evaluation, and to conservatively account for variation in human populations.	Overestimates

9. CONCLUSION

Using conservative assumptions, the assessment indicated that offsite residents who live as close as 200 meters directly downwind from the firing location are safe from breathing air emissions from the M200. It is believed that the assumptions contained in this analysis are conservative enough to be protective of all the population including the sick, elderly, and children.

10. RECOMMENDATIONS

At installations where offsite residents are located less than 200 meters from the M200 firing locations, a more site-specific evaluation is recommended. However, it should be noted that at most training installations, training areas are located at least 1,000 meters (over half a mile) away from populated areas.

The results from this assessment are intended for a hypothetical training facility, and actual results can vary depending on site-specific conditions. This assessment used conservative assumptions (e.g., worst-case meteorological conditions, receptor located directly downwind, etc.) and it is believed that most site-specific analyses would result in even lower concentrations. Therefore, the results from this assessment should be applicable to most training facilities, unless site-specific conditions vary significantly.

11. POINT OF CONTACT

Questions about this report may be directed to Ms. Joleen Mobley at (800) 222-9698 (ext 2953) or (410) 436-2953.

PREPARED BY:

JOLEEN MOBLEY

Environmental Scientist

Environmental Health Risk Assessment

Volen Mobles

Program

APPROVED BY:

DAVID L. DAUGHDRILL Program Manager

Environmental Health Risk Assessment

Hulf

STAFFORD D.F.R. COAKLEY

Environmental Engineer

Environmental Health Risk Assessment

Program

APPENDIX A REFERENCES

- 1. U.S. Army (1994). *Technical Manual, Army Ammunition Data Sheets for Small Caliber Ammunition*. TM-43-0001-27.
- 2. U.S. Army (1989). Field Manual, M16A1 and M16A2 Rifle Marksmanship, FM 23-9.
- 3. U.S. Army. Email communication between Ms. Tamera Clark-Rush, AEC, and Ms. Hsieng-Ye Chang, USACHPPM. Subject: Electronic copy of Firing Point Emission Study Series 3 Emission Factors, 16 August 2000.
- 4. USACHPPM (Aug 2000). Ambient Air Quality Consultation NO. 43-EL-1485-00 Air Dispersion Modeling Evaluation For Military Munitions, Aberdeen Proving Ground, MD.
- 5. Bowman Environmental, Inc. (1999). *INPUFF2, Multiple Source Integrated Puff Model*, Version 4.1.
- 6. Title 40, Code of Federal Regulations, Part 68 (40 CFR 68), Chemical Accident Prevention Provisions, 1 July 1998.
- 7. U.S. Army. Email communication between Ms. Tamera Clark-Rush, AEC, and Ms. Hsieng-Ye Chang, USACHPPM, 19 August 1999.
- 8. Army Training Evaluation Protocol (ARTEP) 7-20-MTP, *Mission Training Plan for the Infantry Battalion*.
- 9. EPA (April 2000). Region 3 Risk Based Concentration (RBC) Tables. Available online at www.epa.gov/reghwmd/risk/riskmenu.htm
- 10.EPA (Nov. 1999). Region 9 Preliminary Remediation Goals (PRG). Available online at www.epa.gov/region09/waste/sfund/prg/index.html
- 11.EPA (1999). *Integrated Risk Information System*. Available online at http://www.epa.gov/iris/
- 12. EPA. *National Ambient Air Quality Standards*. Available online at http://www.epa.gov/ airprogm/airs/criteria.html
- 13. Total Petroleum Hydrocarbon Criteria Working Group (1997). Development of Fraction Specific Reference Doses (RfDs) and Reference Concentrations (RfCs) for Total Petroleum Hydrocarbons (TPH), Volume 4. Amherst Scientific Publishers. Amherst, MA.
- 14. Total Petroleum Hydrocarbon Criteria Working Group (1997). *Development of Fraction Specific Reference Doses (RfDs) and Reference Concentrations (RfCs) for Total Petroleum Hydrocarbons (TPH)*, Volume 4. Amherst Scientific Publishers. Amherst, MA.

- 15. Manahan, Stanley (1994). *Environmental Chemistry*. Sixth edition. CRC Press, Inc. Boca Raton, FL.
- 16.U.S. Army (1996). Final Screening Risk Assessment for the Anniston Chemical Agent Disposal Facility at the Anniston Army Depot, Alabama. Revision No. 5. Prepared by the U.S. Army Center for Health Promotion and Preventive Medicine for the Program Manager for Chemical Demilitarization. Aberdeen Proving Ground, Maryland.
- 17. U.S. Army (1997). Final Screening Risk Assessment for the Pine Bluff Chemical Agent Disposal Facility at the Pine Bluff Arsenal, Arkansas. Revision No. 1. Prepared by the U.S. Army Center for Health Promotion and Preventive Medicine for the Program Manager for Chemical Demilitarization. Aberdeen Proving Ground, Maryland.
- 18. American Industrial Hygiene Association (AIHA) (1999). *Emergency Response Planning Guidelines*. AIHA Press, Fairfax, VA.
- 19. Department of Energy (1998). *Temporary Emergency Exposure Limits*, Revision 15. http://www.scapa.bnl.gov.
- 20. Agency for Toxic Substances and Disease Registry (1990). *Toxicological Profile for Acrolein*.

APPENDIX B AIR DISPERSION MODELING OUTPUT DATA

Table B-1: Air Modeling Output Data for the Cartridge, 5.56MM Blank, M200 (M16A1) - 100 meter location

		Q	2	QN	7.582E-05	ND 1	4.295E-05	3 487E-06	2.382E-04		1.710E-03	1.581E-03	1.365E-03	Water Productive Tradesia	4.399E-05	1.669E-04	QN	9.10/E-05	2	2	1.929E-05	2 2	UNI B 380E 0E	2.303E-03	10.71
7 round 2 secon		7.17			7.58	- -	-	-	2.3	1.11	L	1.5	1.3		4.3	9.	,	9.7	\perp		1.9		0	200	1
		ON	QN	QN	1.539E-08	ND 246F	8.719E-09	7 079F-10	4.836E-08	The Market State	3.472E-07	3.210E-07	2.771E-07	各金式 计图143次	8.930E-09	3.387E-08	QN .	1.849E-U8	Q :	ON I	3.916E-09	2	1 703E-08	4.508E-08	2000
Nord from the supplies of the		ND ND	ND	QN	1.516E-04	ND 8 ROOF OF	CO-BORC O	6.974E-06	4.765E-04	格式5米特征处理 由企业发展		3.162E-03		# SECTION	8.798E-U5	3.337E-04	ND 1 004F 04	1.02.15-04	ON C	ON	3.838E-U3		1 678F-04	4.442E-04	Q.V
		ND ND	QN	ON	3.90E-04	2 24E 04	4.2.1E-U4	1.79E-05	1.22E-03	Section 1	8.79E-03	8.13E-03	7.02E-03		2.20E-U4	8.38E-04	ND A RRE 04	1.00C-04	2 2	UND O DO O	S.SZE-US	S	4.31E-04	1.14E-03	2
		ON	QN	Q	3.34E-07	1 89E-07			1.05E-08	7.5		6.97E-06	_	10. 表情能影響	1.845-07	/ .30E-U/	4 02E 07	ND	2 2	0 515 00	ND CN	GN	3.70E-07	9.79E-07	2
KOMBERKANDOOKKAAGARKOOKEEEKAATAA 78 Ooktobookee Markookeeka Kareekaa Wakanbookeekaataa Markookeekaa Markookeekaa		2.20E-01	2.10E-01	2.10E-01	2.10E-01	2.10E-01	2.100	1.20E-02	1.30E-02	6 次,在 15 元, 18 数 元	ΑN	AN.	ΑN	K 75.2 75.4 4.1	3.01E-02	4 405 02	5 81E-02	5.61E-02	5.01E-02	1 03E-01	5.61F-02	5.61E-02	8.55E-02	7.68E-02	F R1E_02
Carantal Aced in due (S. S. S		2.30E-01	2.20E-01	2.20E-01	6.20E-01	3.60F-01		=	2.20E+00	.7	1.08E+01	9.64E+00		A STE O1	1001-01	1 345 00	7 10F-01	5.36F-02	5 36E-02	2 92E-02	5.36E-02	5.36E-02	4.45E-01	1.73E+00	5 3GE_02
Logical Company of the Company of th		2.30E-01	2.20E-01	2.20E-01	2.20E-01	3.20E-01	1	त	1.58E+00	TO THE WASHING	1.62E+01	1.53E+01	1.30E+01	3 29E-01	0 085 04	1 33E-01	7.31E-01	5.31E-02	5.31E-02	1 98F-01	5.31E-02	5.31E-02	1.03E+00	1.928+00	5 318-02
7	Acid Gosses W. W.	t ballon, Man	Hydrogen Chloride	Hydrogen Bromide	Phoenhoric Acid	Sulfuric Acid		9		- ;	lotal Suspended Particulate	Particulate Matter <10 microns	Particulate Matter <2.5 microns	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Lead	Magnesium

M200air print100.xls

Authorities		The second second	Cartifoge, 5,55 m	n Blank, M200 (M18A1 (Ring)) 14 Control	MORTER (III) VIII	Manhaka a	No. of founds (I);	के इंड इंड र	Pound)
Control of the cont		Number of ite	AHY.	. 4 P. 29 P 4	\$TINK\$A	11.8 30-15	3	2.	seconds.
Control Cont		Action in		ijon kilije wi pe	r (16 m (16 sm. 4 s	118 58 EE04 }	ະ (ວຸດ)ໄມຍູ່ແຂ່ງມູ່ເຮັ່ງມູດວ່າງເປິດ	2.030E:03	g(iri)((B(s)
CÉMPOUNTY		Marie Sea		griestikësulisj		都認。但且		· · · · · · · · · · · · · · · · · · ·	22,500
Controlled Con		《新新新》	据为 徒 ,例450	1.5.401803.7.7	IF SUBBANA	AVERAGE.			
Configuration Configuratio		Measured	Medianted 3 #	A Measured	Aditsied	FAG us led ?	oral mass of Substance	Substance, 7 Concentration	Substance Faisson Rafe
Component Comp		Live Actual	L. System Control	Backorbund	Emission	Temission 1	(drams/item)	(oranis/m5)	K/d/me/m//sac
December 1.33E-02 5.3E-02 5.61E-02 ND ND ND ND ND ND ND N	Compound 1					F 46.66			
Sale		1.4. Cm9/m3. AK	-77	11.55 (Trigoration 1.1)	*((July)/\$9)	((B./(BW)		CONC	World No.
1.33E-02 5.3EE-02 5.0EE-02 1.40E-02 ND ND ND ND ND ND ND N	anese	5.31E-02		5.61E-02	Q	Q	QN	QN	Q
tum 13E-02 1.34E-02 6.61E-02 ND ND ND ND min 6.31E-02 5.38E-02 6.61E-02 ND ND ND ND film 6.31E-02 5.38E-02 6.61E-02 ND ND ND ND film 6.31E-02 5.38E-02 6.61E-02 ND ND ND ND film 6.31E-02 5.38E-03 6.61E-02 ND ND ND ND film 7.75E-01 1.59E-01 6.51E-02 1.22E-07 1.43E-04 6.52E-05 5.655E-05 fidehyde 8.35E-01 1.39E-01 1.30E-01 1.30E-01 6.78E-05 6.78E-05 5.655E-05 fidehyde 1.39E-01 1.30E-01 1.30E-01 1.30E-01 1.30E-01 1.30E-01 ND ND ND ND fidehyde 2.29E-01 2.37E-01 1.30E-01 1.30E-01 ND ND ND ND fidehyde 2.35E-01 2.37E-01		5.31E-02		5.61E-02	QN	QN	ON	ND	ON
Imm 6.31E-02 5.30E-02 5.61E-02 ND ND ND ND Imm 6.31E-02 5.36E-02 5.61E-02 ND ND ND ND Imm 6.31E-02 5.36E-02 5.61E-02 ND ND ND ND Imm 5.31E-02 5.36E-02 5.61E-02 1.22E-07 1.43E-04 5.55E-05 5.635E-05 5.635E-05<	lum	1.33E-02	1.34E-02	1.40E-02	QN	ND	ND	ND	QN
5.31E-02 5.36E-02 5.61E-02 ND ND ND ND ND 5.31E-02 5.36E-02 5.61E-02 ND ND ND ND ND ND 5.31E-02 5.36E-02 5.61E-02 ND ND ND ND ND ND ND N		5.31E-02	5.36E-02	5.61E-02	QN	ON	QN	ND	QN
5.31E-02 5.38E-02 5.61E-02 ND ND ND ND 2.79E-01 1.59E-01 1.56F-02 1.22E-07 1.43E-04 5.55Z-05 5.63E-09 5.63E-09 2.79E-01 1.59E-01 1.50F-01 1.22E-07 ND ND ND ND 1.00E-01 1.60E-01 1.22E-01 ND ND ND ND ND 1.10E-00 1.19E-00 1.19E-00 1.19E-00 1.19E-00 ND ND ND ND 2.29E-01 2.29E-01 2.29E-01 2.29E-01 ND ND ND ND 2.29E-01 2.29E-01 2.29E-01 ND ND ND ND ND 2.29E-01 2.29E-01 2.37E-01 ND ND ND ND ND 3.52E-01 2.37E-01 3.52E-01 ND ND ND ND 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND 4.0E-01 4.0E-01	mu	5.31E-02	5.36E-02	5.61E-02	QN	ON	QN	QN	QN
2.79E-01 1.59E-01 5.61E-02 1.22E-07 1.43E-04 5.652E-05 5.635E-05 5.635E-05 9.83E-02 1.11E-01 1.20E-01 5.81E-08 6.78E-05 2.637E-05 2.677E-09 9.83E-02 1.11E-01 1.20E-01 1.80E-01 1.80E-01 1.80E-01 1.60E-01 ND ND ND 1.19E-00 1.19E-00 1.19E-00 1.90E-01 1.20E-01 ND ND ND ND 2.20E-01 2.29E-01 2.29E-01 ND ND ND ND ND 2.27E-01 2.29E-01 2.29E-01 ND ND ND ND ND 2.27E-01 2.27E-01 2.27E-01 ND ND ND ND ND 2.27E-01 2.37E-01 2.87E-01 ND ND ND ND ND 2.26E-01 2.37E-01 2.37E-01 ND ND ND ND ND 3.52E-01 2.35E-01 3.52E-01 ND ND	Jium	5.31E-02	5.36E-02	5.61E-02	2	QN	QN	Q	9
1.00 1.00		2.79E-01	1.59E-01	5.61E-02	1.22E-07	1.43E-04	5.552E-05	5.635E-09	2.776E-05
ehyde 9.83E-02 1.11E-01 1.23E-01 5.81E-08 6.78E-05 2.638E-05 2.677E-09 shyde 1.80E-01 1.80E-01 1.80E-01 1.90E-01 1.90E-01 1.90E-01 ND ND ND ND aldehyde 2.29E-01 2.29E-01 2.37E-01 2.37E-01 2.37E-01 ND ND ND ND blodehyde 2.37E-01 2.37E-01 2.37E-01 2.37E-01 ND ND ND ND ehyde 2.37E-01 2.37E-01 2.37E-01 ND ND ND ND ehyde 2.37E-01 2.37E-01 2.37E-01 ND ND ND ND ehyde 4.34E-01 4.34E-01 4.34E-01 ND ND ND ND ehyde 4.34E-01 4.36E-01 3.52E-01 ND ND ND ND hyde 4.10E-01 4.10E-01 4.10E-01 4.10E-01 ND ND ND ethyde 4.10E		\$((3)\$P\$(\$)\$()\$	LAMPELL BURK	3.40种类类和1.4	J-1072-1-11	MARIE HELL		CAME INC.	HALLOW KARALLES
shyde 1.80E-01 1.80E-01 1.80E-01 1.80E-01 1.80E-01 1.80E-01 1.90E-00 1.19E+00 ND ND ND ND ND sladehyde 2.37E-01 2.37E-01 2.37E-01 2.37E-01 2.87E-01 2.87E-01 ND ND ND ND ND ehyde 2.35E-01 2.37E-01 2.37E-01 2.37E-01 ND ND ND ND ND ehyde 4.34E-01 4.34E-01 4.34E-01 ND ND ND ND ND ehyde 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND ND ehyde 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND ND ND ehyde 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-	aldehyde	9.83E-02	1.11E-01	1.23E-01	5.81E-08	6.78E-05	2.638E-05	2.677E-09	1.319E-05
1.19E+00 1.19E+00 1.19E+00 1.19E+00 1.19E+00 1.19E+00 1.19E+00 1.19E+00 1.19E+00 ND	ldehyde	1.80E-01	1.80E-01	1.80E-01	QN	QN	ON .	ND	QN
later by dee 2.29E-01 2.29E-01 2.29E-01 ND ND ND ND later by dee 2.37E-01 2.37E-01 2.37E-01 ND ND ND ND elyde 2.37E-01 2.37E-01 2.37E-01 ND ND ND ND elyde 2.96E-01 2.96E-01 2.96E-01 2.96E-01 0.96E-01 ND ND ND elyde 4.34E-01 4.34E-01 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND elyde 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND ND olualdehyde 4.10E-01 4.10E-01 4.10E-01 ND ND <t< td=""><td>ne</td><td>1.19E+00</td><td>1.19E+00</td><td>1.19E+00</td><td>QN</td><td>QN</td><td>QN</td><td>ND</td><td>QN</td></t<>	ne	1.19E+00	1.19E+00	1.19E+00	QN	QN	QN	ND	QN
Idehyde 2.37E-01 3.37E-01	in	2.29E-01	2.29E-01	2.29E-01	QN	QN	ND	ND	QN
Idehyde 2.87E-01 2.87E-01 2.87E-01 ND ND ND ND ehyde 2.95E-01 2.95E-01 2.95E-01 ND ND ND ND ehyde 4.34E-01 4.34E-01 ND ND ND ND ehyde 3.52E-01 3.52E-01 3.52E-01 3.52E-01 ND ND ND ehyde 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND ehyde 4.91E-01 4.91E-01 4.91E-01 ND ND ND ND hyde 4.10E-01 4.10E-01 ND ND ND ND ND ethylbenzaldehyde 4.10E-01 4.10E-01 4.10E-01 4.10E-01 A.10E-01	onaldehyde	2.37E-01	2.37E-01	2.37E-01	QN	QN	ND	ND	QN
ehyde 2.95E-01 2.95E-01 2.95E-01 2.95E-01 2.95E-01 A.34E-01 ND ND ND ND ehyde 4.34E-01 4.34E-01 4.34E-01 N.35E-01 N.52E-01 N.52E-01 ND ND ND ND ehyde 3.52E-01 3.52E-01 3.52E-01 N.52E-01 ND ND ND ND ehyde 4.10E-01 4.91E-01 4.91E-01 4.91E-01 ND ND ND ND hyde 4.10E-01 4.10E-01 4.10E-01 ND ND ND ND ethylbenzaldehyde 4.10E-01 4.10E-01 4.10E-01 ND ND ND ND attylbenzaldehyde 4.10E-01 4.10E-01 4.10E-01 4.10E-01 ND ND ND ND attylbenzaldehyde 4.10E-01 4.10E-01 4.10E-01 4.10E-01 7.76E-02 7.479E-03 7.479E-04 7.592E-08 a 7.30E-00 7.30E-02 6.68E-07 7.76	naldehyde	2.87E-01	2.87E-01	2.87E-01	QN	ON	ND	ND	QN
ehyde 4.34E-01 4.34E-01 4.34E-01 ND ND ND ND aldehyde 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND ehyde 3.52E-01 3.52E-01 ND ND ND ND ehyde 4.91E-01 4.91E-01 ND ND ND ND ethylbenzaldehyde 4.10E-01 4.10E-01 4.10E-01 ND ND ND ethylbenzaldehyde 4.10E-01 4.10E-01 ND ND ND ND ethylbenzaldehyde 4.10E-01 4.10E-01 ND ND ND ND ethylbenzaldehyde 4.10E-01 4.10E-01 ND ND ND ND ethylbenzaldehyde 4.34E+00 4.03E+00 1.37E+00 1.65E-06 1.92E-03 7.479E-04 7.59E-08 e 7.90E-01 7.07E-01 2.29E-02 6.66E-07 7.76E-04 1.894E-04 7.77E-04 7.77E-05 e 7.90E-01	aldehyde	2.95E-01	2.95E-01	2.95E-01	QN	QN	ON	QN	ND
ehyde 3.52E-01 3.52E-01 3.52E-01 3.52E-01 3.52E-01 3.52E-01 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND ND olualdehyde 4.91E-01 4.91E-01 4.91E-01 4.91E-01 ND ND ND ND ND ehyde 4.10E-01 4.10E-01 4.10E-01 A.10E-01 ND ND ND ND ehydbenzaldehyde 4.10E-01 4.10E-01 A.10E-01 A.10E-02 A.10E-03 A.10E-03 A.10E-04 A.10E-04 A.10E-04 A.10E-04 A.10E-04	ildehyde	4.34E-01	4.34E-01	4.34E-01	QN	Q	ON	QN	ON
ehyde 3.52E-01 3.52E-01 3.52E-01 ND ND ND ND olualdehyde 4.91E-01 4.91E-01 ND ND ND ND ND hyde 4.10E-01 4.10E-01 4.10E-01 4.10E-01 ND ND ND ND ethylbenzaldehyde 4.10E-01 4.10E-01 4.10E-01 4.10E-01 ND ND ND ND attionistics 4.10E-01 4.10E-01 4.10E-01 4.10E-01 ND ND ND ND attionistics 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 1.5E-09 1.5E-03 7.479E-04 7.592E-08 attionistics 4.34E+00 1.07E+00 2.29E-02 6.66E-07 7.76E-04 3.019E-04 1.923E-08 ne 7.90E-01 7.07E-01 2.13E-02 7.41E-08 8.64E-05 3.362E-05 3.413E-09 ne 3.32E-01 2.34E-01 3.44E-02 1.58E-07 7.174E-04 7.174E-05 7.174E-05<	eraldehyde	3.52E-01	3.52E-01	3.52E-01	QN	S	ND	S	QN
hyde 4.10E-01 4.10E-01 A.10E-01 ND	aldehyde	3.52E-01	3.52E-01	3.52E-01	QN	QN	QN	QN	ND
htyde 4.10E-01 4.10E-01 ND	-Tolualdehyde	4.91E-01	4.91E-01	4.91E-01	ND	ON	GN	QN	QN
ethylbenzaldehyde 4.10E-01 4.10E-01 4.10E-01 ND ND ND attionship (Controll) 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-01 4.10E-02 4.10E-03 4.10E-04 7.50E-04 7.50E-04 7.50E-08 7.50E-04 7.50E-08 7.50E-04 7.50E-08 7.50E-08 7.50E-04 7.50E-08 7.50E-09 7.50E-04 7.50E-08 7.50E-09 7.50E-09 7.50E-04 7.50E-09 7.50E-08 7.50E-09 7.41E-08 8.64E-05 3.362E-09 7.413E-09 ne 3.32E-01 2.34E-01 3.44E-02 1.58E-07 1.84E-04 7.174E-05 7.282E-09	dehyde	4.10E-01	4.10E-01	4.10E-01	ND	QN	ΩN	QN	QN
aitboric Machine Internation Machine Internat	imethylbenzaldehyde	4.10E-01		4.10E-01	DN	ON		QN	Q
e 4.34E+00 4.03E+00 1.37E+00 1.65E-06 1.92E-03 7.479E-04 7.592E-08 e 1.32E+00 1.07E+00 2.29E-02 6.66E-07 7.76E-04 3.019E-04 3.065E-08 ne 7.90E-01 7.07E-01 2.13E-02 4.18E-07 4.87E-04 1.894E-04 1.923E-08 ne 3.32E-01 2.34E-01 3.44E-02 7.41E-08 8.64E-05 3.362E-05 3.413E-09 ne 3.32E-01 2.34E-01 3.44E-02 1.58E-07 1.84E-04 7.174E-05 7.282E-09	ocarbons from the from the	AND THE SHARE	44.7	IN THE STATE OF TH			11.55	第250年第	1. K. C.
e 1.32E+00 1.07E+00 2.29E-02 6.66E-07 7.76E-04 3.019E-04 3.065E-08 3.065E-08 ne 7.90E-01 7.07E-01 2.13E-02 4.18E-07 4.87E-04 1.894E-04 1.923E-08 ne 1.45E-01 1.21E-01 2.46E-02 7.41E-08 8.64E-05 3.362E-05 3.413E-09 ne 3.32E-01 2.34E-01 3.44E-02 1.58E-07 1.84E-04 7.174E-05 7.282E-09	ane	4.34E+00		1.37E+00	1.65E-06	1.92E-03		7.592E-08	3.740E-04
ne 7.90E-01 7.07E-01 2.13E-02 4.18E-07 4.87E-04 1.894E-04 1.923E-08 1.923E-08 1.45E-01 1.21E-01 2.46E-02 7.41E-08 8.64E-05 3.362E-05 3.413E-09 1.00 1.80E-01	ene	1.32E+00	1.07E+00	2.29E-02	6.66E-07	7.76E-04	3.019E-04	3.065E-08	1.510E-04
ne 1.45E-01 1.21E-01 2.46E-02 7.41E-08 8.64E-05 3.362E-05 3.413E-09 7.41E-04 7.174E-05 7.282E-09	lene	7.90E-01	7.07E-01	2.13E-02	4.18E-07	4.87E-04	1.894E-04	1.923E-08	9.472E-05
3.32E-01 2.34E-01 3.44E-02 1.58E-07 1.84E-04 7.174E-05 7.282E-09	Je	1.45E-01	1.21E-01	2.46E-02	7.41E-08	8.64E-05	3.362E-05	3.413E-09	1.681E-05
	/lene	3.32E-01	2.34E-01	3.44E-02	1.58E-07	1.84E-04	7.174E-05	7.282E-09	3.587E-05

11/27/00

Table B-1: Air Modeling Output Data for the Cartridge; 5.56MM Blank, M200 (M16A1) - 100 meter location

	公司的基本的企业	Articentudom System	MBlank: M200: (A	A GATERITE LAK		No 36 th ound and 16 to 18 to	A Charles Comment	round
	Number of Figure	A.S.	NAMES OF THE	STATE MANAGEMENT	SERVICE OF FACE	AND ROLL	KIN INTERIOR	72 Beconds v
			ODDICAN FLANGPO		TEBLOS ETON CE	Uffill Contentition (Uffill Contentition)	The STOREGA	zigapitora gimi ((gis)
	S. Albertain	A CATATION OF THE PROPERTY OF THE PARTY OF T	OLTES ERRESTITES I			以大量者が移動。 特別的		10. 10. 10. 10. 10. 10. 10. 10. 10. 10.
	TO THE PERSON THE	州城市	性。 性,不是一种的一种,不是一种的一种,不是一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一	NY SHIPS	冷解解级			
	The same of		A NESSTATES		Aufilledick		For Shirmon	Substance Kalls IX p. p.s.c
	Acidanie							TAMENT SEC
The state of the s								
Propane	3.61E-02	3.61E-02	3.61E-02	QN	QN	QN	QN	ON
Propyne	5.44E-02	4.00E-02	3.20E-02	2.63E-08	3.07E-05	1.195E-05	1.213E-09	5.976E-06
Isobutane	4.75E-02	4.75E-02	4.75E-02	ON	ND	QN	QN	QN
1-Butene/Isobutylene	9.41E-02	6.43E-02	4.59E-02	4.42E-08	5.16E-05	2.007E-05	2.037E-09	1.004E-05
1,3-Butadiene/butane	6.88E-02	6.88E-02	6.88E-02	ON	ND	QN	QN	QN
cis-butene	4.59E-02	4.59E-02	4.59E-02	Q	QN	QN	QN	Q
1-Butyne	4.59E-02	4.59E-02	4.59E-02	ND	QN	ON	QN	S
trans-Butene	4.59E-02	4.59E-02	4.59E-02	QN	ND	QN	Q	S
2-Bulyne	4.42E-02	4.42E-02	4.42E-02	ND	ON	QN	Q	S
n-Pentane	5.90E-02	5.90E-02	5.90E-02	QN	ND	QN	QN	QN
n-Hexane		1.16E-01	8.11E-02	2.42E-08	2.82E-05	1.096E-05	1.112E-09	5.480E-06
Dioxins and Furans I to the		1 622	Mark West A	A STATE OF THE STA	计算机设置		Particular second	State of the state of
23/8-1CDD	4.20E-09	4.65E-09	5.72E-09	Q	QN	ND	QN	QN
12378-PECDD	2.90E-09	3.45E-09	3.35E-09	Q	ON	ND	QN	QN
123478-HXCDD	1.96E-09	2.29E-09	2.22E-09	QN	QN	QN	QN	QN
1236/8-HXCUU	2.03E-09	2.34E-09	3.95E-09	Q	Q	ON	QN	QN
123789-HXCUU	6.39E-09	7.43E-09	7.30E-09	Q.	Q	QN	QN	ND
1234070-HPCUU	4.83E-09	4.40E-09	9.89E-09	QN	QN		QN	ND
OCUD 2373 TOPE	5.90E-08	6.69E-08	6.59E-08	2.14E-15	2.50E-12	9.716E-13	9.862E-17	4.858E-13
23/8-1 CDF	2.89E-09	3.68E-09	3.47E-09	Q	QN	ND	ND	QN
123/8-PECDF	3.94E-09	4.61E-09	4.68E-09	Q	2	ND	QN	QN
234/8-PECDF	3.08E-09	3.92E-09	3.62E-09	QN	QN	QN	QN	QN
123478-HXCDF	2.20E-09	2.64E-09	5.11E-09	QN	Q	QN	QV	QN
1236/8-HXCDF	2.24E-09	2.71E-09	2.69E-09	QN	QN	QN	QN	Q
123/89-HXCDF	2.36E-09	2.74E-09	2.74E-09	QN	QN	QN	QN	Q
2346/8-HXCDF	1.15E-09	1.40E-09	1.39E-09	S	QN	ND	QN	QN
1234678-HPCUF	1.40E-09	1.63E-09	4.86E-09	QN	Q	QN	QN	ON

	The state of the s	Cartridge 5556 (fi	UNBERTAL M200 (M16A1fRIIIE) WYS	W16A1(R)(E)		No. of rounds(I) size to		7 7 7
	Number of Ite	Number of Items: Trial#dA-2	1572 229 1766 1 JAN 126 15 15 150 150 150	Trial #24">	06/1/2	Celease duration (I)		Seconds
	TO THE PARTY OF TH	₹	alguna Mila W pe	r 110m ((gs)) 47	F 18158E 04 7	Unit concerniation juct	1 . 2.030E-04	g/m²/(g/s)
		YATTO FILIT	igittéstikéstilts		J. 194.134		· · · · · · · · · · · · · · · · · · ·	何 と 発 は できる ない
		Trial #24-		Average	PROPERTY.			
	Measured .	Measured	Neasured .	Adilistet	Addisted.	Total Mass of Substance in	Substance	Substance
	SATISTICS.	T. Actual P.					Concentration	Emission/Rate
Compound	CONTRIBUTION OF	colicanifican	Concentration	Pacition			(grams/m)	(O(light)/sec
100 170 100 100 100 100 100 100 100 100	E. A. CHITTO IN CO.	· (李·(秦)(南)(南)(中)	· (Ib///ikim)	((b)(b)(New)		S. SONC	
1-32-12-12-12-12-12-12-12-12-12-12-12-12-12	6.82E-10	8.17E-10	1.30E-09	ND	an	QN	QN	QN
	3.20E-09			QN	QN	QN	QV	S
\$0800 CANA	Lines True been	3.7	非机器 多数 数数据	於允別就使	* * * * * * * * * * * * * * * * * * * *	を	1	A STREET
Ammonia (NH3)	3.50E+00	3.50E+00	NA	ND	QN			CN
Carbon Dioxide (CO2)	4.59E+02	4.59E+02	NA	2.25E-04	2.63E-01	1.023E-01	1.038E-05	5.114E-02
Carbon Monoxide (CU)	5.64E+02	5.75E+02	ΑN	2.80E-04	3.26E-01	1.268E-01	1.288E-05	6.342E-02
Oxides of Nitrogen (NOx)	2.71E+01	2.58E+01	NA	1.30E-05	1.51E-02	5.893E-03	5.981E-07	2.946E-03
g	2.62E-01	2.62E-01	_	1.29E-07	1.50E-04	5.838E-05	5.926E-09	2.919F-05
VOCS-F. St. Control of the Control o		THE PARTY OF	Ž.	建设设置		William Control of the Control of th	No. of the second	2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Propene	1.89E-01	1.89E-01	1.72E-03	1.05E-07	1.22E-04	4.763E-05	4.834E-09	2.381E-05
Ulchiorodiflouromethane	2.47E-03	2.97E-03	2.97E-03	4.87E-11	5.67E-08	2.207E-08	2.240E-12	1.104E-08
Chlorodifluoromethane	3.54E-03	3.54E-03	3.54E-03	QN	ND	ON	QN	QN
Freon 114	6.99E-03	6.99E-03	6.99E-03	QN	QN	QN	QN	QV
Chloromethane	1.03E-03	1.45E-03	1.03E-03	1.78E-10	2.08E-07	8.080E-08	8.201E-12	4.040E-08
Vinyi Cirioride	2.56E-03	2.56E-03	2.56E-03	Q	QN	QN	QN	ND
Rromomethene	8.83E-U3	4.42E-03	2.21E-03	2.61E-09	3.05E-06	1.185E-06	1.203E-10	5.927E-07
Chloroethane	2.00E-03	3.005-03	3.68E-U3	2	2	QN	QN	ND
Dichlorofluoromethane	4 21 E-03	4.04E-03	4.04E-03			QN	Q	QN
Trichloroflouromethane	5 R2E-03	1 ROE 02	4.215-03	ON CO	ON I	QN	QN	QN
Pentane	2.02E-03	2 OFF 02	1.09E-03	9.20E-11	1.0/E-0/	4.173E-08	4.236E-12	2.087E-08
Acrolein	2 DAE 04	2.93E-03	Z.90E-03	ON.	ON I	QN	QN	QN
1 1-Dichlorathana	10-340-7	2.11E-01	Z.Z9E-03	1.14E-07	1.33E-04	5.168E-05	5.245E-09	2.584E-05
Freon 113	7.695.03	4.05E-03	4.05E-03		Q	ND	QN	QN
Acetone	F 46E 02	7.00E-03	7.58E-03	Q	Q	ND	QN	S
Methyl Iodide	5.405-02	3.40E-UZ	2.85E-01	Q	2	ND	QN	QN
Carbon Disultido	3.01E-U3	5.61E-U3	5.81E-03	Q	QN	ND	QN	Q
Calibor Disuring	Z.80E-0Z	3.43E-02	3.11E-03	1.57E-08	1.83E-05	7.127E-06	7.234E-10	3.563E-06

	Mundella (inc.	ANUMBEROTITE ACENTICISTUS PROTOS PROT	MBIERKANZOONNIERYTRUE) Pasta zo estan partiement Generalieskappartiem (CAD)	MEATIRM TO THE PARTY OF THE PAR	AND A MORE THAN A STATE OF THE	No. 100 frouthbotton (100 - 200 - 100 from 100 f	Property (Action of the condition of the	Thirty Seconds 1/2
CAMELLOOK ASSESSED TO THE	T. A. S. A. C. S. C. S. S. S. S. S.	CALLEDY LASTING		AL STATE OF	Total Control Control			112
			CONTRACTOR AND THE CONTRACTOR OF THE CONTRACTOR	Available.	A WARRES			
	Measured.	Measored					Substance: Concentration:	//Substance
Compound	Contenients (Contenients)							(g/ilem)/sec
Acetonitrile	2.69E-01	2.69E-01	1.68E-03	1:48E-07	1.73E-04	6.721E-05	6.821E-09	3.360E-05
3-Chloropropene	3.13E-03	3.13E-03	3.13E-03	.QN	ND	QN	QN	QN
Methylene Chloride	1.98E-01	2.67E-01	1.18E-01	7.08E-08	8.25E-05	3.209E-05	3.257E-09	1.605E-05
tert-Butyl Alcohol	3.03E-03	3.03E-03	3.03E-03	QN	ND	QN	QN	QN
Acrylonitrile	6.94E-02	6.51E-02	2.17E-03	3.63E-08	4.23E-05	1.645E-05	1.670E-09	8.225E-06
trans-1,z-Ulchloroethene	3.96E-03	3.96E-03	3.96E-03	Q	Q	ND	ND	QN
Metnyl t-butyl Etner	3.61E-03	3.61E-03	3.61E-03	2	ΩN		QN	ND
Hexane	4.58E-02	7.05E-01	1.73E-01	1.20E-07	1.40E-04	5.464E-05	5.546E-09	2.732E-05
1,1-Dichloroethane	3.97E-03	3.97E-03	3.97E-03	Q	ND	QN	S	QN
Vinyl Acetate	3.52E-03	3.52E-03	3.52E-03	QN	QN	QN	QN	QN
cis-1,2-Dichloroethene	3.96E-03	3.96E-03	3.96E-03	QN	Q	QN	QN	Q
z-Butanone	1.47E-03	1.77E-03	2.95E-03		1.05E-06	4.075E-07	4.136E-11	2.037E-07
Etnyl Acetate	1.08E-02	1.44E-02	3.60E-03	6.98E-09	8.14E-06	3.166E-06	3.213E-10	1.583E-06
Metnyl Acrylate	3.52E-03	3.52E-03	3.52E-03	Q	Q	ND	ND	QN
Children in the state of the st	4.88E-03	4.88E-03	4.88E-03	Q	QN	ND	ON .	Q
Carbon Totrachiorida	2.73E-03	5.46E-03	5.46E-03	2	QN	QN.	QN	QN
1 2-Dichlorethane	4 24E 02	0.29E-U3	0.29E-03	ON OF S	ON S	QN	QN	QN
Benzene	6.21E-02	1.2 IE-02 8 07E 04	4.05E-03	6.73E-09	7.85E-06	3.055E-06	3.100E-10	1.527E-06
Isonctane	4 B7E-01	4 R7E 02	3.20E-03	3.40E-U/	4.03E-04	1.568E-04	1.592E-08	7.840E-05
Heptane	4 10E-03	4.07 E-03	4.6/E-03		Q S	ON	QN .	QN
Trichloroethane	A POE 03	4 90E 02	4.105-03		QN.	ON	QN	Q
Ethyl Acrylate	4.00E-03	4.00E-03	4.00E-U3	2 2	2	QN	QN	Q
1.2-Dichloropropana	A 82E 02	4.03E-03	4.09E-03	Q.		ON	QN	QN
Methyl Methodolete	4.02E-03	4.02E-03	4.0ZE-U3	2		QN:	QN	ΩN
Dibromomethane	7.11E-03	7 11E 03	4.09E-03		2 2	QN S	QN	QN
1 4-Dioxane	2 BOE 03	2 BOE 02	7.115-03			ON	QN	QN
210000	3.00L-03	3.005-03	3.60E-03	Q	QN	QN	QN	ΩN

	Sand Bill State	Sandage Carridge, 5,56·m	nm Blank M200 (M16A1 Rille)	A16A1 Rifle)	医精发的	No. of rounds (I)	The state of the	round
·	Number of Her		294.1		K-H-130-150	release duration (t):		seconds
	TO SAME OF THE PARTY OF THE PAR	LING ACCOUNT EXPLOSIVE W	eight will flykt par flem (15%) 144		718;58 E:04 F9	Unit Contentration (UC):	Z(030E-04	g/m³/(g/s)
			ig Test Results!	為其種也可能				
	计划图像	2. 经 ISH	3 4 MIRQ	Avalana.	VAVALAND S			
	De l	Measured	Measured	Adjusted	Adlusted	Total Mass of Substance	Suballance	Substance
					を発する。		Soncentrations	Emission Rate
punoc	Contrehiration	Concentration	Concentration	Factor.	a Eactor	(drams/lem)	Marchand Community	(d/liem)/set
1.6.6.		. (Chigada), 211	I. I. (Colombia in				P. CONC.	A PIER P.
a)		6.70E-03	6.70E-03	ND	QN	QN	QN	QN
4-Methyl-2-Pentanone	4.10E-03	3.69E-03	4.10E-03	2.01E-09	2.35E-06	9.129E-07	9.265E-11	4.564E-07
Toluene	9.05E-02	9.42E-02	3.77E-03	5.12E-08	5.97E-05	2.322E-05	2.357E-09	1.161E-05
Octane	4.67E-03	4.67E-03	4.67E-03	QN	QN	ND	QN	QN
trans-1,3-Dichloropropene	4.54E-03	4.54E-03	4.54E-03	QN	QN	QN	S	QN
Ethyl Methacrylate	4.67E-03	4.67E-03	4.67E-03	QN	Q	QN	Q	Q
1,1,2-Trichloroethane	5.46E-03	5.46E-03	5.46E-03	Q	ND	QN	QN	Q
l ertrachloroethene	6.78E-03	6.78E-03	6.78E-03	QN	QN	QN	QN	QN
2-Hexanone	4.10E-03	4.10E-03	4.10E-03	QN	QN	QN	QN	QN
Dibromochloromethane	8.52E-03	8.52E-03	8.52E-03	QN	QN	QN	QN	Q
1,2-Dibromoethane	7.68E-03	7.68E-03	7.68E-03	QN	ND	ND	QN	2
Chlorobenzene	4.60E-03	4.60E-03	4.60E-03	QN	ND	ND	QN	QN
1,1,1,2-Tetrachloroethane	6.87E-03	6.87E-03	6.87E-03	QN	QN	QN	Q	£
Ethylbenzene	3.47E-03	3.47E-03	1.74E-03	1.07E-09	1.25E-06	4.869E-07	4.942E-11	2.434E-07
m/p-Xylene	1.30E-02	1.30E-02	8.68E-03	2.96E-09	3.45E-06	1.342E-06	1.362E-10	6.710E-07
o-Xylene	8.68E-03	8.68E-03	8.68E-03	5.50E-10	6.41E-07	2.496E-07	2.533E-11	1.248E-07
Styrene	8.52E-03	8.52E-03	4.26E-03	4.73E-09	5.51E-06	2.143E-06	2.176E-10	1.072E-06
Bromotorm	1.03E-02	1.03E-02	1.03E-02	Q.	Q	QN	QN	ND
Cumene 4 4 5 5 T 4 1 1 1	4.9ZE-03	4.92E-03	4.92E-03	QN	QN	QN	QN	ON
1,1,2,2-1 etrachlorethane	6.87E-03	6.87E-03	6.87E-03	2	QN	QN	QN	QN
1,2,3-I richioropropane	6.03E-03	6.03E-03	6.03E-03	QN	QN	ND	QN	Q
Bromobenzene	6.42E-03	6.42E-03	6.42E-03	2	QN	ON	QN	QN
4-Etnyitoluene	2.46E-03	2.95E-03	1.97E-03	5.31E-10	6.19E-07	2.410E-07	2.446E-11	1.205E-07
1,3,5-1 rimethylbenzene	1.97E-03	1.47E-03	1.47E-03	2.32E-10	2.70E-07	1.052E-07	1.068E-11	5.260E-08
Alpha Methyl Styrene	4.83E-03	4.83E-03	4.83E-03	Q	QN	ND	QN	S
1,2,4-Trimethylbenzene	4.92E-03	4.92E-03	4.92E-03	3.11E-10	3.63E-07	1.413E-07	1.434E-11	7.063E-08
1,3-Dichlorobenzene	6.01E-03	6.01E-03	6.01E-03	2	ND	QN	QN	QN

11/27/00

	The second second	F. Gattridger 5,59-m	MIBIBUNINZOO!	VII BAILEINE) XK	Method de Automa	Noxofirothree (I) ac. 1750	1 1 18 11	rollind
	I I Numbarof Ital	TIS THE THIRD WAY	100 May	PTOBINESS	De Mado	CALLES BEAUTION CONTRACTOR IN CALLED	(# AVC) 2	Sedonds
	H. S. A. T.	Wester/followers/W	CONTAINIENVER		NEGOTION OF	Untersheringential	FF: 6/21030 E-04	g/m³/(g/8):
では、 一般の	1. 1. S. 1. S. 1.	IN SECTION OF THE PROPERTY.	ig resett same.		T. SPANIES		KAN TAN	2 1 1 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2
	N. W. W. W. W. W. W. W.	2 (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	**X74.454 *** 4	1	1.00		100 Carlo	
10年の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の				Avdrage A			100 S 100 S 200 S	N. Hotanro
	A CALL OF THE PARTY OF THE PART		DO DESCRIPTION			STOLEN BEHINDER TOTAL FOR	Colice Pallon	Emission Rain
	Adrian	Sydnalist.	Backgröunde	C Emilianor	FEET STONE	THE PARTY OF THE P		L'AMBANIE
Compound T	Concentration	College College	Coole at the life.	Facility	TO ENTRE OF			See Million A
AND THE STATE OF THE STATE OF				((E) (Em)) =	((16./16.ATG))		CONC	ERI
1,4-Dichlorobenzene	6.01E-03	6.01E-03	6.01E-03	QN	QN	QN	QN	QN
Benzyl Chloride	5.18E-03	5.18E-03	5.18E-03	QN	QN	QN	QN	QN
1,2-Dichlorobenzene	6.01E-03	6.01E-03	6.01E-03	QN	<u>Q</u>	QN	QN	2
Hexachlorethane	9.68E-03	9.68E-03	9.68E-03	QN	ΩN	QN	QN	QN
1,2,4-Trichlorobenzene	7.42E-03	7.42E-03	7.42E-03	QN	QN	QN	S	<u>Q</u>
Hexachlorobutadiene	1.07E-02	1.07E-02	1.07E-02	QN	Q	QN	QN	QN
VOC Tentatively Identified Compounds (TICs)	mpounds (TICs)							
SVOCS	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	となべない と	の記事はいるの	がない される	the british	2000年の日本は100年に対象は100年に対象は100年	100 C 1000	
N-nitrosodimethylamine	1.75E-02	1.78E-02	1.81E-02	Q	QN N	74	7	QN
Bis(2-chloroethyl)ether	1.75E-02	1.78E-02	1.81E-02	Q	Q	QN	QN	CN
Phenol	1.09E-02	9.43E-03	1.81E-02	5.63E-09	6.57E-06	2.555E-06	2.594E-10	1.278F-06
2-chlorophenol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	CN
1,3-dichlorobenzene	1.75E-02	1.78E-02	1.81E-02	QN	S	QN	QN	QV
1,4-dichlorobenzene	1.75E-02	1.78E-02	1.81E-02	QN	Q	QN	QN	Q
1,2-dichlorobenzene	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
Benzyl alcohol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
Bis(2-chloroisopropyi)ether	1.75E-02	1.78E-02	1.81E-02	2	Q	QN	QN	QN
z-metnylpnenol	1.75E-02	1.78E-02	1.81E-02	Q	Q	QN	QN	QN
Hexachioroethane	1.75E-02	1.78E-02	1.81E-02	Q	Q	QN	QV	QN
N-nitroso-di-n-propylamine	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
4-metnyiphenol	1.75E-02	1.78E-02	1.81E-02	QN	Q	QN	QN	QN
Nitrobenzene	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	Q
Isophorone	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
Z-nitrophenol	1.75E-02	1.78E-02	1.81E-02	Q	QN	QN	QN	QN
z,4-dimethylphenoi	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
Bis(z-chloroethoxy)methane	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	Q	QN
z,4-dichiorophenol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN

toung	seconds	g/tt/,(d/s)			Emission Rate	Y.(g/ilem)/sec		NO.	6.573F-09	CN	Q	QN	Q	2	Q	S	G	S	CN	200	Q	Q	QN	QN	QN	2	Q	9	QN.	QN	Q	QN	QN.	QN
P.R. C. N.	7	2.030E-04	Trailed to the second s	Sufferance	Concentration	(grams/m)	000	A STANSON AND AND AND AND AND AND AND AND AND AN	1.334E-12	QN	QN	QN	Q	QN	QN	9	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	Q	QV	QN	QN	QN	ND
-	-	Unit Concentration (UC): 📯		Total Mass of Substance	EMMed : Y	(grafis/lem)		ON	1.315E-08	ON	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN	ON	QN	QN	QN	QN	QN	QN
	1000	18:586.04	TO V	Albhadav	*Adjusted	*Effication	THE NEW	QN	3.38E-08	QN	QN ON	ND	ND	DN	QN	Q	QN	Q	QN	ND	QN	ND	ND	ND	ND	QN	QN	ND	ND	ΩN	ND	QN	ND	Q
MARTHINE) K.	Trial #24 = 5			Average	Adjusted	Emilssion	(IIS / III) &	ON .	2.90E-11	QN	QN	QN	ON	QN	QN	QN	QN	QN	Q	QN	QN	QN	QN	QN	Q	QN	Q	Q	Q	Q	QN	Q	Q	2
UNEBURK M290 (MAGATENIE)	29.	eloute, N. E. vv., per liem (ps.	garast Results,	F-L-CDBIN	weasured.	Background	Concentration:	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	3.62E-02	3.62E-02	1.81E-02	1.81E-02	3.62E-02	1.81E-02	1.81E-02	1.81E-02	3.62E-02	3.62E-02	1.81E-02	1.81E-02
		- 41	Super Act Child	Tright#2 5	Measured		Concentration	1.78E-02	1.49E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	3.56E-02	3.56E-02	1.78E-02	1.78E-02	3.56E-02	1.78E-02	1.78E-02	1.78E-02	3.56E-02	3.56E-02	1.78E-02	1.78E-02
The state of the s		1 100 5 10 5	The state of the s	(A. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	The same of the sa	Adding	Concentration (1.75E-02	1.72E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	3.51E-02	3.51E-02	1.75E-02	1.75E-02	3.51E-0Z	1.75E-02	1.75E-02	1.75E-02	3.51E-02	3.51E-02	1.75E-02	1.75E-02
								1,2,4-trichlorobenzene	Naphthalene	4-chloroanlline	Hexachlorobutadiene	4-chloro-3-methylphenol	2-methylnaphthalene	Hexachlorocyclopentadiene	2,4,6-trichlorophenol	2,4,5-trichlorophenol	2-chloronaphthalene	2-nitroaniline	Acenaphthylene	Dimethylphthalate	2,6-dinitrotoluene	Acenaphthene	3-nitroaniline	z,4-dinitrophenoi	Urbenzoruran 2.4 dinitrataluan	z,4-uillitotoldeile	4-miliophenol	alianonu	4-cnlorophenyl-phenylether	Ulethylphthalate	4-nitroaniline	4,6-dinitro-z-metnyipnenol	iv-nitrosodipnenyiamine(1)	4-bromophenyl-phenylether

found (2)	74 Z 030E-04 g(m)(g(s))		n Emission Rate	(0/lem)/sec	ER	QN	QN	9	Q	Q	CN	S	2	2 2	2 2		UND 1001 C	3.389E-U/	QN .	2	Q	Q	2	Q	Q			1.789E-06	1.443E-07	9.560E-09	2.788E-08	2.748E-08	2.953E-11
	*		Concentration	(grams/m.)	CON	Q	QN	Q	£	QN	QN	Ð	CN	2	2 2	2 2	7 208E 44	1.300E-11		Q	Q	Q.	Q !	QN	Q			3.632E-10	2.930E-11	1.941E-12	5.660E-12	5.579E-12	5.994E-15
STEATURE TO STEATURE					P. Land Co. Co. Co. Co.	ON	QN	QN	ON	QN	QN	QN	QN	GN	QN	CN	7 198F-07	IS IS	2 2	GN GN	ON			ON	QN	Sales of the sales of the sales of the sales		3.5/9E-U6	2.887E-07	1.912E-08	5.577E-08	5.497E-08	5.905E-11
17. 17. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18	This is a	的人。如此		Finision ?	IN THE WA	Q	2	Q	2	S	QN	QN	QN	S	QN	2	1.85E-06	GN	S	2 2		QV CN	CN		ON.	3.15 A	0 200 0	3.20E-00	1.42E-U/	4.91E-08	1.43E-07	1.41E-U/	1.52E-10
ATTACHETY OF THE		K AUTHOR	Adjusted	Emission Facility	(16.)(6.6)	QN	Q	QN	Q	QN	Q	Q	N Q	Q	QN	Q	1.59E-09	QN	CN	S		S	S	2	2	おおく (のとうない き)	+	6 26E 40	4 22F 44	4.22E-11	1 245 10	1.21E-10	1.30E-13
UDIBLIDIKAMEGOKKAA GASIRATIBIKAKAKA 	OT JAKIR GALITIK	A Miller H	Measurade.	Deckgound Johnsmilleligh	K (morms)	1.81E-02	3.6ZE-UZ	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	1.81E-02	3.98E-02	1.81E-02	1.81E-02	1.81E-02	1 81E-02	1.81E-02	1.81E-02	1 81E-02	30	\$ \$4.00 m		3 08E-05	1 845 06	2 805 05	5.03E-03	7 48E 06	7, 101-00
		" THE STATE OF THE		Contestination	THE WAY	1./0E-02	3.30E-02	1.78E-02	1./8E-02	1./8E-02	1.785-02	1./8E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	6.23E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02	1.78E-02		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.58E-02	1.09F-03	6 58E-05	2.335-03	2.49E-04	3 56F-05	20.000
Number of the Section	SANCE AND A SANCE OF THE PARTY				A ZEE ON	2 54E 02	4 755 00	1.755.02	1.735-02	1.755.02	1.735-02	1.73E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.47E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	1.75E-02	Compounds (TICs)		1.47E-02	1.26E-03	8.59E-05	2.63E-04	2.80E-04	3.86E-05	
	の一般の一個などのである。			-		Pentachlorophenol	Phenanthrene	Anthracene	Di-n-hutvlnhthatata	Flioranthene	Pyrana	Butylhonzylphtholoto	Donestayipiiiidade	perizo(a)aninracene	Chrysene	3,3-dicnlorobenzidine	Bis(2-ethylhexyl)phthalate	Ui-n-octylphthalate	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)anthracene	Benzo(g,h,i)perylene	fentified	TO-13 (PAHS)	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	

3. (4.1) 1 Found 2. (4.1) 1		Dstance S. Substance	regiration Emission Rate	4E-12	9.474E-12 4.667E-08	9.016E-12 4.441E-08				1.105E-11 5.442E-08	9.694E-12 4.775E-08	1.646E-11 8.106E-08	2.052E-12 1.011E-08	1.939E-11 9.551E-08	The Marie of the Control of the Cont	QN QN	QN	QN	QN. QN	QN QN	QN QN	QN QN	QN QN	ON ON			ON ON ON		
		Substance Lysting													14. 化体体的 2. 基本的数据														
No. of rounds (I) { release duration (I) Unit (Concentration (UC)	-	F Tolal Massill		5.777E-08	9.334E-08	8.883E-08	7.774E-08	1.044E-07	6.886E-08	1.088E-07	9.551E-08	1.621E-07		1.910E-07	提展完全的公司的特別的工作的推出	QN	QN	QN	QN	QN	QN	QN	QN	QN	QN			ON NO	ON ON ON
1 30 20 2		Average Adjusted	Emission Freedom	1.48E-07	2.40E-07	2.28E-07	2.00E-07	2.68E-07	1.77E-07	2.80E-07	2.45E-07	4.17E-07	5.20E-08	4.91E-07	10.光光期松加速		QN	QN	Q N	Q	잎	QN	QN	QN	QN	2	טא	QN QN	
(M16A1 Rille) Triel #24 => er (leam (l68)) =>			Emission Bactor (Britigm)	1.27E-10	2.06E-10	1.96E-10	1.71E-10	2.30E-10	1.52E-10	2.40E-10	2.11E-10	3.57E-10	4.46E-11	4.21E-10	THE STATE OF	QN	QN	QN	S	QV	QN	QN	QN	ON	ND	S	ני	28	2 Q Q
Intrelant, M200; (M16A1 Riffe) 15. 2-229 Etc. 1 Triel #24 elght Riffe)	ig testification	L Sally II.		1.81E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05	1.81E-05		NA	NA	۷A	ΝΑ	ΝΑ	Ϋ́	AN	ΑN	۸N	NA	ΝA	1	NA	N N
Cartridged6,56-mms: Triatr#1A=7	ATGHIN	Medsurede.	Contential on	2.13E-04	3.38E-04	3.56E-04	3.02E-04	4.09E-04	2.67E-04	4.27E-04	3.74E-04	6.40E-04	7.83E-05	7.47E-04	=2. *€	3.37E-03	3.37E-03	3.37E-03	3.37E-03	3.37E-03	3.37E-03	3.37E-03	3.37E-03	3.37E-03	3.37E-03	3.37F-03	0.01	3.37E-03	3.37E-03 3.37E-03
Car Number of items:	334 R. S.	Trial #1		2.45E-04	4.03E-04	3.51E-04	3.15E-04	4.21E-04	2.80E-04	4.38E-04	3.86E-04	6.48E-04	8.24E-05	7.71E-04	***	3.39E-03	3.39E-03	3.39E-03	3.39E-03	3.39E-03	3.39E-03	3.39E-03	3.39E-03	3.39E-03	3.39E-03	3.39E-03		3.39E-03	3.39E-03 3.39E-03
			<i>p</i> 1000			acene		anthene	inthene	ЭС	Je	d)pyrene	thracene	erylene	the war of the th						zene	ene	ene	enzene	oluene			Unitrotoluene	Dinitrotoluene Dinitrotoluene
	7,400		4.60 4.60 4.60 4.60 4.60 4.60 4.60 4.60	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(e)pyrene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenz(a,h)anthracene	Benzo(g,h,i)perylene	Energetics, s. κ	Nitrobenzene	2-Nitrotoluene	3-Nitrotoluene	4-Nitrotoluene	Nitroglycerine	1,3-Dinitrobenzene	2,6-Dinitrotoluene	2,4-Dinitrotoluene	1,3,5-Trinitrobenzene	2,4,6-Trinitrotoluene	RDX		4-Amino-2,6-Dinitrotoluene	4-Amino-2,6-Dinitrotoluene 2-Amino-4,6-Dinitrotoluene

Pentaerythritoltetranitrate Dibutyl phthalate Dioctyl phthalate	Number of life Trial file Actual A Actual A Actual Actual Actual Actual Actual Actual Actual Actual Actual	MARTINGO SOLUTION SOL	THE BEACH OF THE SELLE OF THE S	ND N	ON DOWN ON	Unite president and the state of the state o	ND N	Substance Emission Rate (giteln) sec.
IIIIG	8.48E-02	8.42E-02	NA	QN	QN	ON	2	CN
Loothotes:)

¹ATC = Aberdeen Test Center (for additional information on the data, refer to the Firing Point Emission Study) NA = Not Applicable ND = Not Detected

Table B-2: Air Modeling Output Data for the Cartridge, 5.56MM Blank, M200 (M16A1) - 200 meter location

	Distriction of the	A SAN JOSE Cartrido By Sub Burn	MIBIBINK M200//M18A9/BHIANSAWADS	MARADIRIMANS	MACONE STATE OF	1.5	C. L. C. Land School St. W. Coll.	25.00.00
	Numberofitem		200 20 200 200	100 miles	3/10/3/2015		THE PROPERTY OF THE PROPERTY O	SON BRIDE
		layoru oldaşılı Ma	AMIGNATE WITH BANKADAM REGISTRATION		ME03989183		50/30/03/40	(W.1/(0/0))/ Civil
		A COLEMBITAR			THE RESIDENCE	。1019年10日 1019年10日		
				LAVETBOOK.	N. WANDERED P.			Substance
pilinodilino				EMERICAL STATES		IN COUNTRY BUTTON FOR THE STORY OF THE STORY RESERVED TO THE STORY OF THE STORY RESERVED TO THE STORY OF THE		Emission Rate:
	W (6100) 34					SHALL STATE OF SHALL SHA	K KCONCIF.	WW ERK OF
Abid Gases A. A. M. S. F. S. & Z. S. S.	E.R. P. D. L. L.	CU.SANTANTO	LEDNING THE	(September 1)	AL AND AL		1. S.	Salva Alenta Salva
Hydrogen Fluoride	2.30E-01	2.30E-01	2.20E-01	ND	QN	QN	QN	QN
Hydrogen Chloride	2.20E-01	2.20E-01	2.10E-01	QN	QN	ON	Q.	QN
Hydrogen Bromide	2.20E-01	2.20E-01	2.10E-01	QN	DN	QN	2	S
Nitric Acid	5.80E-01	6.20E-01	2.10E-01	3.34E-07	3.90E-04	1.516E-04	2.949E-09	3.791E-05
Phosphoric Acid	2.20E-01	2.20E-01	2.10E-01	QΝ	ΟN	QN	QN	QN
Sulfuric Acid	3.20E-01	3.60E-01	2.10E-01	1.89E-07	2.21E-04	8.590E-05	1.670E-09	2.147E-05
Cyanide Tall Charles	A. C. S.	1. 大型物理(4)	ALK WANTED	张明桥: 小头	1.44 · 10 · 10 · 10 · 10 · 10 · 10 · 10 ·	大方式, 15.00 (1.00 A Mark # 1874)	The Control of the Co) 不
Particulate Cyanide	3.40E-02	2.10E-02	1.20E-02	1.54E-08				1.744E-06
Hydrogen Cyanide	1.58E+00	2.20E+00	1.30E-02	1.05E-06	1.22E-03	4.765E-04	9.265E-09	1.191E-04
Particulates !!	\$	(** (*********************************	14.6.4.4.6. 6.6.6.6.6.6.6.6.6.6.6.6.6.6.6	BOOK THE	1.45.13.13.13.13.13.13.13.13.13.13.13.13.13.	电影 以外保险的数据的	一个 一	· 一下 大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大大
Total Suspended Particulate	1.62E+01	1.08E+01	, AN	7.54E-06				8.552E-04
Particulate Matter <10 microns	1.53E+01	9.64E+00	NA	6.97E-06	8.13E-03	3.162E-03	6.149E-08	7.905E-04
Particulate Matter <2.5 microns	1.30E+01	_	NA	6.02E-06	7.02E-03	2.731E-03	5.310E-08	6.826E-04
Metals Same and the state of		での数数数ので	Replantation of the	特別の計学と	ALCONOMICS.	A. A. W. A. S.	STATE OF THE PARTY	4. 4. 4. 62. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
Aluminum	3.29E-01	3.67E-01	5.61E-02	1.94E-07	2.26E-04		1.711E-09	2.200E-05
Antimony	9.96E-01	1.93E+00	1.51E-01	7.36E-07	8.58E-04	3.337E-04	6.489E-09	8.343E-05
Arsenic	1.33E-02	1.34E-02	1.40E-02	Q	ΩN	QN	QN	QN
Barrum	7.31E-01	7.10E-01	5.61E-02	4.02E-07	4.68E-04	1.821E-04	3.542E-09	4.554E-05
Selymun	5.31E-02	5.36E-02	5.61E-02	Q.	Q.	QN	Q	QN
Capitim	3.31E-02	5.30E-02	5.61E-02		QN	QN	Q	QN
Calcium	1.98E-U1	2.92E-01	1.03E-01	8.51E-08	9.92E-05	3.858E-05	7.502E-10	9.646E-06
Caromium	5.31E-02	5.36E-02	5.61E-02	Q	QN	QN	DN	QN
Cobalt	5.31E-02	5.36E-02	5.61E-02	S	QN	QN	QN	Q
Copper	1.03E+00	4.45E-01	8.55E-02	3.70E-07	4.31E-04	1.678E-04	3.263E-09	4.195E-05
Lead	1.92E+00	1.73E+00	7.68E-02	9.79E-07	1.14E-03	4.442E-04	8.637E-09	1.110E-04
Magnesium	5.31E-02	5.36E-02	5.61E-02	QN	QN	QN	Q	QN
Manganese	5.31E-02	5.36E-02	5.61E-02	QN	QN	QN	QN	QN
Nickel	5.31E-02	5.36E-02	5.61E-02	QN	QN	QN	QN	QN

	Numberof items: 7	umberoj iterus: Tribi#15 = 1 umberoj iterus: Tribi#15 = 1 iteraj iki iki iki		M(19A2, Rifle) Trial #2A => !!em ([bs:) =>		表(合介) 'USI) 新加州 (A (合介) 'USI) A (A (10 16 15 15 15 15 15 15 15 15 15 15 15 15 15	round: seconds: g/m/(6/g)
	10 A	KAZAK LEATCEININGTEST	TRESULDING TO THE PERSON.	CANALL .	LIGHTONETA		1.67以后含于1	
Compound	Trial#1 Measured	Measured A	A TOBINA	Adjusted	Adlisted Emission	of Substance Emitted	Substance Concentration	(Substance
		72		(file)	(B)/B NEW	- S	S CONOS AS	(A) ER
Selenium	1.33E-02	1.34E-02	1.40E-02	QN	QN		QN	QN
Silver	5.31E-02	5.36E-02	5.61E-02	QN	QN	QN	Q	QN
Thallium	5.31E-02	5.36E-02	5.61E-02	QN	QN	QN	QN ON	QN
Vanadium	5.31E-02	5.36E-02	5.61E-02	QN	QN	QN	Q	QN
Zinc	2.79E-01		5.61E-02	1.22E-07	1.43E-04	5.552E-05	1.080E-09	1.388E-05
TO11/1/Garbony/SP: 小瓜。	153	. 3	STATE OF STREET	1150 4855	8. 以外不可用。		有名外外发生的	の名が大学の
Formaldehyde	9.83E-02	1.11E-01	1.23E-01	5.81E-08	6.78E-05	2.638E-05	_	6.594E-06
Acetaldehyde	1.80E-01	1.80E-01	1.80E-01	ΩN	QN	QN	QN	ND
Acetone	1.19E+00	1.19E+00	1.19E+00	<u>Q</u>	QN	QN	QN	Q
Acrolein	2.29E-01	2.29E-01	2.29E-01	QN	ON	QN	QN	Q.
Proprionaldehyde	2.37E-01	2.37E-01	2.37E-01	QN	QN	QN	Q	QN
Crotonaldehyde	2.87E-01	2.87E-01	2.87E-01	QN	QN	QN	QN	QN
Butyraldehyde	2.95E-01	2.95E-01	2.95E-01	QN	ON	ON	QN	QN
Benzaldehyde	4.34E-01	4.34E-01	4.34E-01	Q	Q	ON	QΝ	QN
Isovaleraldehyde	3.52E-01	3.52E-01	3.52E-01	ON	ND	QN	QN	QN
Valeraldehyde	3.52E-01	3.52E-01	3.52E-01	Q	오	GN	QN	QN
o,m,p-Tolualdehyde	4.91E-01	4.91E-01	4.91E-01	Q	Ω	QN	QN	QN
Hexaldehyde	4.10E-01	4.10E-01	4.10E-01	Q	QN	QN	ON	QN
2,5-Dimethylbenzaldehyde	4.10E-01	4.10E-01	4.10E-01	Q	QN	ON	QN	ND
Hydrocarbons Frankiscal Calles					A. C.	TO SECURITY OF THE PARTY OF THE		
Methane	4.34E+00	4.03E+00	1.37E+00	1.65E-06	1.92E-03	7.479E-04	1.454E-08	1.870E-04
Ethylene	1.32E+00	1.07E+00	2.29E-02	6.66E-07	7.76E-04	3.019E-04	5.871E-09	7.548E-05
Acetylene	7.90E-01	7.07E-01	2.13E-02	4.18E-07	4.87E-04	1.894E-04	3.684E-09	4.736E-05
Ethane	1.45E-01	1.21E-01	2.46E-02	7.41E-08	8.64E-05	3.362E-05	6.538E-10	8.406E-06
Propylene	3.32E-01	2.34E-01	3.44E-02	1.58E-07	1.84E-04	7.174E-05	1.395E-09	1.794E-05
Propane	3.61E-02	3.61E-02	3.61E-02	Q	ND	GN	QN	QN
Propyne	5.44E-02	4.00E-02	3.20E-02	2.63E-08	3.07E-05	1.195E-05	2.324E-10	2.988E-06
Isobutane	4.75E-02	4.75E-02	4.75E-02	Ω	Q	QN	QN	QN
1-Butene/Isobutylene	9.41E-02	6.43E-02	4.59E-02	4.42E-08	5.16E-05	2.007E-05	3.903E-10	5.018E-06

Table B-2: Air Modeling Output Data for the Cartridge, 5.56MM Blank, M200 (M16A1) - 200 meter location

	KARPIENT COCATRIOGRADOSO INUMDER CHICONA FAITHBIRETA TECHNICATE CHICAGO CONTRACTOR	KISTRICHT KOGETTINGEN SORT NUMBERGIGERINE FILITEITEN FRI FERSTERREN IN TOTAL CHIDITING EST	Trigitals inkepty 120 121 July Kuttikal 118 118 128 128	UNITERALITIES IN TOTAL STATES IN THE STATES		Figure (Orbital Property (Orbital Property Property Property Property Property Property (Orbital Property Prope		Sundt-liky, services
Punodiupo II				Addiner Addiner Enistim	ANGINE IN			iv Stušiance Emiššion Rite Ik (oriem) sek
keiteration মান্ত ক্রিকার্থনীয়া 1,3-Butadiene/butane	6.88E-02	5.71(mg/mb/mg/kg) 6.88E-02	6.88E-02	K. ((b)/(e)/(s)	KOSZIDTIKEWNI		THE ONOTHE	
cis-butene	4.59E-02	4.59E-02	4.59E-02	QN	Q	20	2 2	2 2
1-Butyne	4.59E-02	4.59E-02	4.59E-02	QN	QN	QN	2	2 2
trans-Butene	4.59E-02	4.59E-02	4.59E-02	QN.	ND	QN	QN	2
2-Butyne	4.42E-02	4.42E-02	4.42E-02	QN	QN	QN	QN	Q.
n-Pentane	5.90E-02	5.90E-02	5.90E-02		QN	QN	2	QN.
n-nexane		1.16E-01	_	2.42E-08	2.82E-05	1.096E-05	2.131E-10	2.740E-06
DIOXINSIAND FURANS SERVED 1	.2	1 2 1 1 2	2	46. NS1 1.38	Marin Services		I A POST AND A STATE OF THE PARTY OF THE PAR	2000年代 1848年 1
12378 BECDD	4.20E-09	4.65E-09	5.72E-09	Q	Q	QN		QN
12310-F ECDD	2.90E-U9	3.45E-09	3.35E-09	QN	Q	QN	ON	9
123478-HACUU	1.96E-09	2.29E-09	2.22E-09	Q	QN	QN	S	QN
1230/8-HACDD	2.03E-09	2.34E-09	3.95E-09	Q	QN	QN	QN	QN.
123/89-HACDD	6.39E-09	7.43E-09	7.30E-09	Q	2	QN	ON	QN
OCDD	4.83E-09	6.40E-09	9.89E-09				QN	ON
2378-TCDF	2.89E-08	3.68E-09	0.59E-U8	2.14E-15	2.50E-12	9.716E-13	1.889E-17	2.429E-13
12378-PECDF	3.94E-09	4.61F-09	4 68E-09	Q Q	2 2	ON S		Q
23478-PECDF	3.08E-09	3.92E-09	3.62E-09	G C	2 2	QN CN		
123478-HXCDF	2.20E-09	2.64E-09	5.11E-09	QN	QN	9	2 0	
123678-HXCDF	2.24E-09	2.71E-09	2.69E-09	QN	QN	QN	QN	QN
123/09-TACDF	2.36E-09	2.74E-09	2.74E-09	QN	QN	ND	QN	QN
1234678-HPCDF	1.155-09	1.40E-09	1.39E-09	QN	QN	QN	QN	QN
1234789-HPCDE	1.40E-U9	1.63E-09	4.86E-09	9	Q	QN	QN	ON
OCDE	3.20E.00	0.1/E-10	1.30E-09	ON S	QN !	QN	Q	QN
Pormonont Cococ	3.20E-09	3.7.3E-08	5.U/E-U9	ON.	QN	QN	QN	QN
Ammonia (NH3)	3.50F+00	3 50E±00	NA NA		100 A	Particular Section Section 1	1,410,910,010,010	S. L. A. Milliand L.
Carbon Dioxide (CO2)	4.59E+02	4 59F+02	ΔN	2 25E 04	ND C See C	ND 4 675T 64	ON S	QN
Carbon Monoxide (CO)	5,64E+02	5.75E+02	AN	2.23E-04	2.03E-01	1.023E-01	1.989E-06	2.557E-02
				E.00E-04	3.205-01	1.200E-U1	2.467E-U6	3.171E-02

	114.30	: Caitridgersi56	im Blanka M200/(M16A2 Rifle)	M16A2 Rifle)	W. San Action Designation	Novel 1 (1) (1) (1) (1) (1) (1)	(4月968至2456)	round
	Number of llem	tumber of thems, within #1,4 = 5		Frigues =>	1, pr. 130; Q rg		詞	90
		A THE STATE OF THE		Hade of the same	18.58E1047	Million in a manifest (MC)		0 (m; ((g/g)),
The state of the s	A Trible HA	removement	CITOR AND THE RESIDENCE OF THE PARTY OF THE		ATTENDED TO			
Punoduo	Measured	Measured		Adustra	Average.	TO THE PARTY OF TH	South Street	Substance
	Actuals		Backgraftfel	Emission of	Emission	with Moram Syleth)	TO CHIEF THE POST	K-U(d/)(dm)/sec
* S. 1. 1. 1	A. S. (MO/M) S. A.	1(frmg/mb)	9.44 (MIST/CN)75.55	:::(1000/(Tem))	(Ib)/IBI NEW)	TANK THE SOUTH THE STATE OF	FIFEENCHE	MIDTER
Oxides of Millogeri (NOX)	2.71E+01	2.58E+01	NA	1.30E-05	1.51E-02	5.893E-03	1.146E-07	1.473E-03
	_	2.62E-01	NA	_	1.50E-04	5.838E-05	1.135E-09	1.460E-05
VOCS WEIGHT WAS AND STATE OF THE	**	THE POLL	1,1 TR. 1988	3	New 经累存实	TO DESCRIPTION OF THE PROPERTY OF THE PARTY	-3	KANA STATES
Ciphicodia	1.89E-U1	1.89E-01	1.72E-03	1.05E-07	1.22E-04	4.763E-05	9.261E-10	1.191E-05
Diction difference	2.4/E-03	2.97E-03	2.97E-03	4.87E-11	5.67E-08	2.207E-08	4.292E-13	5.518E-09
Chlorodiffuoromethane	3.54E-03	3.54E-03	3.54E-03	Q.	Q	ND	QN	QN
Fredn 114	6.99E-03	6.99E-03	6.99E-03	Q	Q	QN	QN	NO.
Chloromethane	1.03E-03	1.45E-03	1.03E-03	1.78E-10	2.08E-07	8.080E-08	1.571E-12	2.020E-08
Viriyi Chloride	2.56E-03	2.56E-03	2.56E-03	2	ND	ND	QN	QN
1,3-butadiene	8.85E-03	4.42E-03	2.21E-03	2.61E-09	3.05E-06	1.185E-06	2.305E-11	2.964E-07
Bromornethane	3.88E-03	3.88E-03	3.88E-03	Q	Q	QN	QN	Q
Chloroethane	2.64E-03	2.64E-03	2.64E-03	2	QN	QN	QN	Q.
Ulchlorofluoromethane	4.21E-03	4.21E-03	4.21E-03	Ω	DN	QN	QN	9
Irichloroflouromethane	5.62E-03	1.69E-03	1.69E-03	9.20E-11	1.07E-07	4.173E-08	8.115E-13	1.043E-08
Pentane	2.95E-03	2.95E-03	2.95E-03	Q	QN	ND	QN	Q
Acrolein	2.04E-01	2.11E-01	2.29E-03	1.14E-07	1.33E-04	5.168E-05	1.005E-09	1.292E-05
1,1-Dichlorethene	4.05E-03	4.05E-03	4.05E-03	Q.	QN	QN	QN	Q
Application	7.68E-U3	7.68E-03	7.68E-03	Q	Q	ND	QN	QN
Mothyl Iodida	3.40E-02	3.40E-02	2.85E-01	2	Q.	QN	QN	ND
Carbon Disulfide	2.81E-03	3.01E-U3	3.41E-03	ND 4 E7E OB	ON CO.	QN	QN	QN
Acetonitrile	20-202-02	20-705-02	3.115-03	00-3/6.1	1.83E-U5	7.12/E-U6	1.386E-10	1.782E-06
2 Chloropropos	2.09E-01	2.09E-U1	1.68E-03	1.48E-07	1.73E-04	6.721E-05	1.307E-09	1.680E-05
Math. Jone Others	3.13E-03	3.13E-03	3.13E-03	Q	Q	ND	QN	Q.
Wethylene Chloride	1.98E-01	2.67E-01	1.18E-01	7.08E-08	8.25E-05	3.209E-05	6.241E-10	8.023E-06
tert-Butyl Alcohol	3.03E-03	3.03E-03	3.03E-03	Q	Q	ND	QN	QN
Acrylonimie	6.94E-02	6.51E-02	2.17E-03	3.63E-08	4.23E-05	1.645E-05	3.199E-10	4.112E-06
Mathyl t-Rutyl Ether	3.90E-03	3.96E-03	3.96E-03	Q !	2	QN	QN	QN
Hovana	3.015-03	3.01E-03	3.61E-03	2	Q	QN	QN	QN
וופאמווכ	4.30E-UZ	7.05E-01	1./3E-01	1.20E-07	1.40E-04	5.464E-05	1.062E-09	1.366E-05

	104			P-4((6:0)) ((dis)),	100 100 100			
100								I Weilster Anie
1-Dichloroethane	3 97E-03	2 07E 03	E SIMORMAN		de an Kleva			15 (9/(6fg)/sec
Vinyl Acetate	3 52 F-03	3.57E-03	3.97E-03	Q.	Q	QN	QN	ON
cis-1,2-Dichloroethene	3.96E-03	3.96E-03	3.52E-03	2 2	Q	QN	QN	QN
2-Butanone	1.47E-03	1.77E-03	2.95E-03	8 98F-10	1 OFF OF	ON .	QN	ON
Ethyl Acetate	1.08E-02	1.44E-02	3,60E-03		8 44E 06	4.075E-07	7.924E-12	1.019E-07
Methyl Acrylate	3.52E-03	3.52E-03	3.52E-03	ON ON	00-14E-00	3.166E-06	6.156E-11	7.915E-07
4 1 Triphland	4.88E-03	4.88E-03	4.88E-03	QN	2	2 2	QN	QN
I, I, I : I I I I I I I I I I I I I I I	2.73E-03	5.46E-03	5.46E-03	QN	S	CN CN	2	Q
Carbon Tetrachloride	6.29E-03	6.29E-03	6.29E-03	QN	2	2 5	ON C	Q
,z-Dicilioremane	1.21E-02	1.21E-02	4.05E-03	6.73E-09	7.85E-06	3 055 06	ON C	QN
	6.39E-01	6.07E-01	3.20E-03	3.46E-07	4.03E-04	3.035E-00	5.940E-11	7.637E-07
	4.67E-03	4.67E-03	4.67E-03	QN	S	1.300E-04	3.049E-09	3.920E-05
	4.10E-03	4.10E-03	4.10E-03	CN	S		Q	QN
l richloroethane	4.88E-03	4.88E-03	4.88E-03	S	2 2		ΩN	QN
Ethyl Acrylate	4.09E-03	4.09E-03	4.09E-03	S		ON I	Q	QN
1,2-Dichloropropane	4.62E-03	4.62E-03	4.62E-03	2	2 2	ON C	Q	QN
Methyl Methacrylate	4.09E-03	4.09E-03	4.09E-03	2	2 2	ON	Q	QN
Dibromomethane	7.11E-03	7.11E-03	7.11E-03	S	2 2		Q	QN
r,4-Uloxane	3.60E-03	3.60E-03	3.60E-03	QN	S		Q !	QN
Marinourical Contractions	6.70E-03	6.70E-03	6.70E-03	S	S			QN
4-Wethyr-z-Pentanone	4.10E-03	3.69E-03	4.10E-03	2.01E-09	2.35E-06	9 129E-07	1 775 F	QN
	9.05E-02	9.42E-02	3.77E-03	5.12E-08	5 97E.05	2 2225		Z.282E-07
	4.67E-03	4.67E-03	4.67E-03	CN		Z.3ZZE-U5	4.516E-10	5.806E-06
trans-1,3-Dichloropropene	4.54E-03	4.54E-03	4.54E-03	S		ON	Q	QN
Ethyl Methacrylate	4.67E-03	4.67E-03	4.67E-03	2 2	2 2	ON.	QN	QN
1,1,2-Trichloroethane	5.46E-03	5.46E-03	5.46E-03	2	2 2	ON	QN	QN
l ertrachloroethene	6.78E-03	6.78E-03	6 78F-03	2 2		QN	QN	QN
2-Hexanone	4.10E-03	4.10E-03	4 10F-03			QN	QN	QN
Dibromochloromethane	8.52E-03	8.52E-03	8 52E 03	2 2		QN	QN	QN
		- >> !!!>:						

	Section at Landson Control	TOTAL SECTION		A LA CA COLUMN	AND AND O	2. 本語の意味の意味のない。 東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東京の東		
	27.11.	TOO OF BRIDE STATE OF THE STATE	EI.	Main N. Karina	20 C S	5:0		round sk
	Numberoniem	Numberofilems) n Instruction	1, 1,729, 45	T-131#24=X	130/23			seconds
		ellexplosive Wel	ante Niew Peritenti	(tent) (lbs.) = 1	8.585.04	Unicanterification (UC); il	717.727.8E.05	8 E-05 g/m/(g(s))***********************************
		A MANAGEMENT OF THE PLANT OF TH				《 100 · 1	***	14. 金龙湖南京
Componie	THE BULLY	Red Red W	NAME OF THE OWN	E Pelallow !	A SILVE BUELE	of Stostante Emiled	Substance.	Substance Friestoff Pala
The second secon		The second secon	Batter brothers	Ents Jon	Emission		(diems/mm).	state (date)/sec
A STATE OF STATE OF THE STATE OF STATE		Let (mg/hr) Last.			(Jesus News)	14. 小女子女们是不多。 14. 小女子女们是不多。	HARGONG !!!	N. CHECKY.
1,2-Dibromoethane	7.68E-03	7.68E-03	7.68E-03	Q	Q Q	ND	QN	QN
Chlorobenzene	4.60E-03	4.60E-03	4.60E-03	QN	QN	ND	QN	QN
1,1,1,2-Tetrachloroethane	6.87E-03	6.87E-03	6.87E-03	Q	2	ND	QN	QN
Ethylbenzene	3.47E-03	3.47E-03	1.74E-03	1.07E-09	1.25E-06	4.869E-07	9.467E-12	1.217E-07
m/p-Xylene	1.30E-02	1.30E-02	8.68E-03	2.96E-09	3.45E-06	1.342E-06	2.609E-11	3.355E-07
o-Xylene	8.68E-03	8.68E-03	8.68E-03	5.50E-10	6.41E-07	2.496E-07	4.853E-12	6.239E-08
Styrene	8.52E-03	8.52E-03	4.26E-03	4.73E-09	5.51E-06	2.143E-06	4.168E-11	5.359E-07
Bromoform	1.03E-02	1.03E-02	1.03E-02	QN	QN	ON	QN	QN
Cumene	4.92E-03	4.92E-03	4.92E-03	Q	Q	ND	QN	ND
1,1,2,2-Tetrachlorethane	6.87E-03	6.87E-03	6.87E-03	QN	QN	ND	QN	ND
1,2,3-Trichloropropane	6.03E-03	6.03E-03	6.03E-03	Q	QN	ND	ND	QN
Bromobenzene	6.42E-03	6.42E-03	6.42E-03	Q	QN	QN	QN	QN
4-Ethyltoluene	2.46E-03	2.95E-03	1.97E-03	5.31E-10	6.19E-07	2.410E-07	4.687E-12	6.026E-08
1,3,5-Trimethylbenzene	1.97E-03	1.47E-03	1.47E-03	2.32E-10	2.70E-07	1.052E-07	2.046E-12	2.630E-08
Alpha Methyl Styrene	4.83E-03	4.83E-03	4.83E-03	QN	ND	ND	QN	QN
1,2,4-Trimethylbenzene	4.92E-03	4.92E-03	4.92E-03	3.11E-10	3.63E-07	1.413E-07	2.747E-12	3.532E-08
1,3-Dichlorobenzene	6.01E-03	6.01E-03	6.01E-03	Q	QN	QN	QN	ND
1,4-Dichlorobenzene	6.01E-03	6.01E-03	6.01E-03	QN	ND	QN	Q	QN
Benzyl Chloride	5.18E-03	5.18E-03	5.18E-03	QN	QN	QN	QN	Q.
1,2-Dichlorobenzene	6.01E-03	6.01E-03	6.01E-03	ΩN	QN	QN	QN	ΩN
Hexachlorethane	9.68E-03	9.68E-03	9.68E-03	QN	QN	ND	QN	QN
1,2,4-Trichlorobenzene	7.42E-03	7.42E-03	7.42E-03	QN	QN	QN	QN	ND
Hexachlorobutadiene	1.07E-02	1.07E-02	1.07E-02	QN	ND	ND	QN	QN
VOC Tentatively Identified Compounds (TICs)	npounds (TICs)							
A LANGE OF THE STATE OF THE STA			12 Contract (12 Co	100000000000000000000000000000000000000			NAME OF STREET	CANADA SANDARA SANDARA
N-nitrosodimethylamine	1.75E-02	1.78E-02	1.81E-02	QN	Q	QN	QN	ND
Bis(2-chloroethyl)ether	1.75E-02	1.78E-02	1.81E-02	QN	ΩN	DN	QN	QN
Phenol	1.09E-02	9.43E-03	1.81E-02	5.63E-09	6.57E-06	2.555E-06	4.969E-11	6.389E-07
2-chlorophenol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN

	A THE PLANT DEATH	antidgenoice.n	TOTAL BLACK MIN 2001	MIGAZIRINA) IR	Carine Kirky	NOXOLINGUINAS INSTITUTE OF THE PROPERTY OF THE	A CONTRACTOR ALIEN	PRINTER SALES MAY
	Numberrofilleriffe	S-STITIBILITY APERS	The state of the s	FT/IBINZANES	KSEA (DEVISE)	STATE OF THE PROPERTY OF THE PARTY.		Section de la constant de la constan
			distribution and		10 - O - O		80.3011111111111111111111111111111111111	A (S) D) (A)
		A COLF INTERTION					ST COMPANY OF STREET	
Thirty Manager	A Realistance	Willem 20	THE PROPERTY OF THE PARTY OF TH	STANDED OF THE STANDED				SUBSECTION OF THE PROPERTY OF
								M. T. (U/IEM) sec
1,3-dichlorobenzene	1.75E-02	1.78E-02	1.81E-02	QN	QN	CN CN	ND	SECTION OF SECTION
1,4-dichlorobenzene	1.75E-02	1.78E-02	1.81E-02	QN ON	QN	QN		
1,2-dichlorobenzene	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	2	GN GN
Benzyl alcohol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
Bis(2-chlorolsopropyl)ether	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
2-methylphenol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	Q
Hexachloroethane	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	9	QN
N-nitroso-di-n-propylamine	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN ON	QN
4-methylphenol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
Nitrobenzene	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	9	QN
Isophorone	1.75E-02	1.78E-02	1.81E-02	ND	QN	ND	QN	ON.
2-nitrophenol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
2,4-dimethylphenol	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	QN
Bis(2-chloroethoxy)methane	1.75E-02	1.78E-02	1.81E-02	ND	QN	QN	QN	QN
Z,4-dichlorophenol	1.75E-02	1.78E-02	1.81E-02	QN	ND	QN	QN	QN
1,2,4-trichlorobenzene	1.75E-02	1.78E-02	1.81E-02	ON	QN	QN	QN	QN
Naphthalene	1.72E-02	1.49E-02	1.81E-02	2.90E-11	3.38E-08	1.315E-08	2.556E-13	3.286E-09
4-cnloroaniine	1.75E-02	1.78E-02	1.81E-02	Q	QN	QN	9	QV.
4 oblara 3 mathulabarat	1.75E-02	1.78E-02	1.81E-02	Q	QN	ON	QN	QN
2 mothylasaktholasa	1.75E-02	1./8E-02	1.81E-02	QN	Q	ND	QN	QN
Hoverblorogicalogical	1.755-02	1.78E-02	1.81E-02	Q	QN	QN	QN	QN
2 4 & trichlorophonol	1.735-02	1.78E-02	1.81E-02	QN	Q	QN	QN	QN
2.4.0-urcinoloprierioi	1.755-02	1./8E-02	1.81E-02	Q	QN	ND	QN	S
z,4,5-tricnioropnenoi	1./5E-02	1.78E-02	1.81E-02	Q	ON	QN	2	QN
z-cnioronaphthalene	1.75E-02	1.78E-02	1.81E-02	Q	QN	QN	QN	QN
z-mu oaniime	1./5E-02	1.78E-02	1.81E-02	Q	ON	QN	QN	QN
Acenaphinylene Dimothylabitalata	1.755-02	1.78E-02	1.81E-02	Q	QN	ON	QN	QN
2 & digitalahana	1.75E-02	1.78E-02	1.81E-02	QN	ND	ND	QN	QN
z'o-alililo(oldene	1.75E-02	1./8E-02	1.81E-02	QN	QN	QN	QN	QN

Number of items: Trigitation 1 (1992)	•		Cartridae: 5:58-m	m.BlankiiM200i(M16A2 Rifle)	M16A2 Rifle)	是明-30	Novolf Pounds (I) - 17 - 3 - 3 - 3 - 3	P (Systemate Cost)	pund
Trief #1 Trief #1 Trief #2		Number of items	: Trial#10/45	\$1 M. 29 E. M. 7	4	1. C. 430). 7 Ti	release duration (I)	7.11	to seconds
Comparison Com		N. S. Williams	et Explosive We	BURNIEW PE	lem/(lbs)) ₹>	8,586,04	Uniticoncertifalish (UC);	14 Tr. 18 E.05	(§/b)/; u/b
Control Cont			ATC FINITOTIVE	(Resultation)	\$45. A. T. B. A.	THE SHARES			D. 100
1,75E-02 1,75E-02 1,81E-02 ND ND ND ND ND ND ND N	Punga	f Triel #1	Trial#2:391	Measured S		Average	of Substante Emilled	Substance	Substance Emission Rata
1.75E-02 1.78E-02 1.81E-02 ND ND ND ND ND ND ND N	_	Actual	Actual	Ebackground?	3.72	Emission	(em)(;; 1.2)	# Porately An	~ ~
1.75E-02 1.78E-02 1.81E-02 ND 3.51E-02 3.56E-02 3.62E-02 ND 3.51E-02 3.56E-02 3.62E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-03 1.78E-03 1.81E-03 ND 1.75E-04 1.78E-05 1.81E-05 ND 1.75E-05 1.78E-05 1.81E-05 ND 1.78E-05 1.81E-05 ND 1.78E-05 1.81E-05 ND 1.78E-05 1.81E-05 ND		51.4 (AUM) 1.4.	(HG/H) 1.1			(Ib./Ibr.NEW)	THE PROPERTY OF THE PARTY OF TH	MAZGONG KI	4.7
3.51E-02 3.56E-02 3.62E-02 ND 3.51E-02 1.76E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-03 1.78E-02 1.81E-02 ND 1.75E-03 1.78E-03 1.81E-02 ND 1.75E-03 1.78E-03 1.81E-02 ND 1.75E-03 1.78E-03 1.81E-02 ND 1.75E-03 1.78E-03 1.81E-03 ND	Acenaphthene	1.75E-02	1.78E-02	1.81E-02		Q		2	
3.51E-02 3.56E-02 3.62E-02 ND 3.51E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND I.75E-02 1.78E-02 1.81E-02 ND IITE-02 1.78E-02 1.81E-02 ND IITE-03 1.78E-03 1.81E-03 ND IITE-03 1.78E-	J-ntroaniline	3.51E-02	3.56E-02	3.62E-02	Q	Q	ON	QN	QN
1,75E-02 1,78E-02 1,81E-02 ND 1,75E-02 1,81E-02 1,81E-02 ND 1,75E-	2,4-dinitrophenol	3.51E-02	3.56E-02	3.62E-02	QN	QN	ND	QN	QN
1.75E-02 1.78E-02 1.81E-02 ND a.51E-02 3.66E-02 3.62E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND a.51E-02 3.66E-02 3.62E-02 ND a.51E-02 3.66E-02 3.62E-02 ND lamine(1) 1.75E-02 1.78E-02 1.81E-02 ND henylether 1.75E-02 1.78E-02 1.81E-02 ND a.51E-02 1.78E-02 1.81E-02 ND bene 1.75E-02 1.78E-02 1.81E-02 ND and 1.75E-02 1.78E-02 1.81E-02 ND bhthalate 1.75E-02 1.78E-02 1.81E-02 ND and 1.75E-02 1.78E-02 1.81E-02 ND and 1.75E-02 1.78E-02 1.81E-02 ND bene 1.75E-02 1.78E-02 1.81E-02 ND and 1.75E-02 1.78E-02 1.81E-02 ND bene 1.75E-03 1.78E-03 1.81E-03 ND bene 1.75E-03 1.78E-03 1.81E-03 ND bene 1.75E-03 1.78E-03 1.81E-03 ND	Dibenzofuran	1.75E-02	1.78E-02	1.81E-02	S	QN	ND	ΟN	QN
yi-phenylether 3.51E-02 3.56E-02 3.62E-02 ND yi-phenylether 1.75E-02 1.78E-02 1.81E-02 ND ate 1.75E-02 1.78E-02 1.81E-02 ND methylphenol 3.51E-02 3.56E-02 3.62E-02 ND nenylamine(1) 1.75E-02 1.78E-02 1.81E-02 ND nenzene 1.75E-02 1.78E-02 1.81E-02 ND e 1.75E-02 1.78E-02 1.81E-02 ND halate 1.75E-02 1.78E-02 1.81E-02 ND hhthalate 1.75E-02 1.78E-02 1.81E-02 ND syllphthalate 1.75E-02 1.78E-02 1.81E-02 ND swl)phthalate 1.75E-02 1.78E-02 1.81E-02 ND	2,4-dinitrotoluene	1.75E-02	1.78E-02	1.81E-02	QN	QN.	ND	QΝ	QN
1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 3.51E-02 3.56E-02 3.62E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND	-nitrophenol	3.51E-02	3.56E-02	3.62E-02	ND	ND	ON	QN	QV
r 1,75E-02 1,78E-02 1,81E-02 ND 1,75E-02 1,78E-02 1,81E-02 ND 3,51E-02 3,56E-02 3,62E-02 ND 3,51E-02 3,56E-02 3,62E-02 ND 1,75E-02 1,78E-02 1,81E-02 ND 1,75E-02	·luorene	1.75E-02	1.78E-02	1.81E-02	Q	2	ND	QN	QN
1.75E-02 1.78E-02 1.81E-02 ND 3.51E-02 3.56E-02 3.62E-02 ND 3.51E-02 3.56E-02 3.62E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND	1-chlorophenyl-phenylether	1.75E-02	1.78E-02	1.81E-02	Q	QN	ND	QN	QN
3.51E-02 3.56E-02 3.62E-02 ND 3.51E-02 3.66E-02 3.62E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND	Diethylphthalate	1.75E-02	1.78E-02	1.81E-02	Q	QN	ND	QN	QN
3.51E-02 3.56E-02 3.62E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND	t-nitroaniline	3.51E-02	3.56E-02	3.62E-02	Q	Ω	ND	ND	QN
1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E	f,6-dinitro-2-methylphenol	3.51E-02	3.56E-02	3.62E-02	Q.	NO O	ND	QN	QN
1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 3.51E-02 3.56E-02 3.62E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND	N-nitrosodiphenylamine(1)	1.75E-02	1.78E-02	1.81E-02	QN	QN	ON	QN	QN
lorobenzene 1.75E-02 1.78E-02 1.81E-02 ND Ilorophenol 3.51E-02 3.56E-02 3.62E-02 ND threne 1.75E-02 1.78E-02 1.81E-02 ND ene 1.75E-02 1.78E-02 1.81E-02 ND tylphthalate 1.75E-02 1.78E-02 1.81E-02 ND nzylphthalate 1.75E-02 1.78E-02 1.81E-02 ND ne 1.75E-02 1.78E-02 1.81E-02 ND ne 1.75E-02 1.78E-02 1.81E-02 ND ne 1.75E-02 1.78E-02 1.81E-02 ND ilorobenzidine 1.75E-02 1.78E-02 1.81E-02 ND ilylphthalate 1.75E-02 1.78E-02 1.81E-02 ND ilylphthalate 1.75E-02 1.78E-02 1.81E-02 ND ilylluoranthene 1.75E-02 1.78E-02 1.81E-02 ND ilyluoranthene 1.75E-02 1.78E-02 1.81E-02 ND il	4-bromophenyl-phenylether	1.75E-02	1.78E-02	1.81E-02	Q	2	ND	QN	QN
threne 3.51E-02 3.56E-02 ND threne 1.75E-02 1.78E-02 1.81E-02 ND ene 1.75E-02 1.78E-02 1.81E-02 ND thene 1.75E-02 1.78E-02 1.81E-02 ND thene 1.75E-02 1.78E-02 1.81E-02 ND nzylphthalate 1.75E-02 1.78E-02 1.81E-02 ND end 1.75E-03 1.78E-03 1.81E-02 ND end 1.75E-03 1.78E-03 1.81E-03 ND end 1.75E-03 1.78E-03 1.81E-0	Hexachlorobenzene	1.75E-02	1.78E-02	1.81E-02	Q	Q	ND	QN	QN
threne 1.75E-02 1.78E-02 1.81E-02 ND ene 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.75E-02 1.78E-02 1.81E-02 ND 1.78E-02 1.81E-02 ND 1.78E-02 1.81E-02 ND 1.78E-02 1.81E-02 ND 1.78E-02 ND 1	Pentachlorophenol	3.51E-02	3.56E-02	3.62E-02	QN	ND	ND	QN	QN
ene 1.75E-02 1.78E-02 1.78E-02 1.81E-02 ND thene 1.75E-02 1.78E-02 1.81E-02 ND thene 1.75E-02 1.78E-02 1.81E-02 ND nzylphthalate 1.75E-02 1.78E-02 1.81E-02 ND a)anthracene 1.75E-02 1.78E-02 1.81E-02 ND ne 1.75E-02 1.78E-02 1.81E-02 ND ilorobenzidine 1.75E-02 1.78E-02 1.81E-02 ND tylhexyl)phthalate 1.75E-02 1.78E-02 1.81E-02 ND ilylphthalate 1.75E-02 1.78E-02 1.81E-02 ND iylhuthalate 1.75E-02 1.78E-02 1.81E-02 ND iylluoranthene 1.75E-02 1.78E-02 1.81E-02 ND ihuvrene 1.75E-02 1.78E-02 1.81E-02 ND	⊃henanthrene	1.75E-02	1.78E-02	1.81E-02	Q	QN	ND	ΩN	QN
tylphthalate 1.75E-02 1.78E-02 1.78E-02 1.81E-02 ND thene 1.75E-02 1.78E-02 1.81E-02 ND nzylphthalate 1.75E-02 1.78E-02 1.81E-02 ND a)anthracene 1.75E-02 1.78E-02 1.81E-02 ND ne 1.75E-02 1.78E-02 1.81E-02 ND ilorobenzidine 1.75E-02 1.78E-02 1.81E-02 ND ilylhexyl)phthalate 1.75E-02 1.78E-02 1.81E-02 ND ilylphthalate 1.75E-02 1.78E-02 1.81E-02 ND ilylphthalate 1.75E-02 1.78E-02 1.81E-02 ND ilylucranthene 1.75E-02 1.78E-02 1.81E-02 ND	Anthracene	1.75E-02	1.78E-02	1.81E-02	QN	QN	ON	QN	ON ·
thene 1.75E-02 1.78E-02 1.81E-02 ND nzylphthalate 1.75E-02 1.78E-02 1.81E-02 ND nzylphthalate 1.75E-02 1.78E-02 1.81E-02 ND ne 1.75E-02 1.78E-02 1.81E-02 ND no	Di-n-butylphthalate	1.75E-02	1.78E-02	1.81E-02	QN	QN	ND	QN	QN
nzylphthalate 1.75E-02 1.78E-02 1.81E-02 ND a)anthracene 1.75E-02 1.78E-02 1.81E-02 ND ne 1.75E-02 1.78E-02 1.81E-02 ND nlorobenzidine 1.75E-02 1.78E-02 1.81E-02 ND thylhexyl)phthalate 1.75E-02 1.78E-02 1.81E-02 ND tylphthalate 1.75E-02 1.78E-02 1.81E-02 ND sylluoranthene 1.75E-02 1.78E-02 1.81E-02 ND sylluoranthene 1.75E-02 1.78E-02 1.81E-02 ND	Fluoranthene	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	Q	QN
1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND alate 1.47E-02 6.23E-02 3.98E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND	Pyrene	1.75E-02	1.78E-02	1.81E-02	QN	QN	ON	QN	QN
1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND alate 1.47E-02 6.23E-02 3.98E-02 1.59E-09 1. 1.75E-02 1.78E-02 1.81E-02 ND	Butylbenzylphthalate	1.75E-02	1.78E-02	1.81E-02	QN	QN	ND	QN	QN
1.75E-02 1.78E-02 1.81E-02 ND	Benzo(a)anthracene	1.75E-02	1.78E-02	1.81E-02	Q Q	ND	ND	QN	QN
alate 1.75E-02 1.78E-02 1.81E-02 ND alate 1.47E-02 6.23E-02 3.98E-02 1.59E-09 1 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND	Chrysene	1.75E-02	1.78E-02	1.81E-02	QN	ND	ND	QN	Q
1.75E-02 6.23E-02 3.98E-02 1.59E-09 1. 1.75E-02 1.78E-02 1.81E-02 ND	3,3-dichlorobenzidine	1.75E-02	1.78E-02	1.81E-02	QN	ND	ON	QN	QN
1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.81E-02 ND 1.75E-02 1.81E-02 ND 1.78E-02 ND 1.81E-02 ND 1.78E-02 ND 1.81E-02 ND 1.81E-	Bis(2-ethylhexyl)phthalate	1.47E-02	6.23E-02	3.98E-02	1.59E-09	1.85E-06	7.198E-07	1.400E-11	1.799E-07
1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.78E-02 1.81E-02 ND 1.75E-02 1.81E-02 ND 1.78E-02 ND 1.81E-02	Di-n-octylphthalate	1.75E-02	1.78E-02	1.81E-02	Q.	ND	ON	QN	QN
1.75E-02 1.78E-02 1.81E-02 ND 1.78E-02 1.81E-02 ND 1.78E-03 1.81E-02 ND	Benzo(b)fluoranthene	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	ΩN	QN
1 75E-02 1 78E-02 1 81E-02 ND	Benzo(k)fluoranthene	1.75E-02	1.78E-02	1.81E-02	QN	QN	QN	QN	ON
ויוטביטל ויוטביטל ויטביטל ואס	Benzo(a)pyrene	1.75E-02	1.78E-02	1.81E-02	2	2	QN	ND	QN

	18 24 20 18 20 48 18 18 18 18 18 18 18 18 18 18 18 18 18	ASSERTED BOOK OF THE BOOK OF THE BOOK OF THE PARTY OF THE	miBlankaM200	(M18A21Riffa))	Spatistic Passes	NAMES OF THE PROPERTY OF THE PARTY OF THE PA		
	Number of the Mark	Numberofilement Trainaine	Private National		11.11.15.02.15.15.15.15.15.15.15.15.15.15.15.15.15.			BACOUGE
	TO SELECT STATES OF THE PARTY.	ATCHEDITION	STATE OF THE PARTY	V. 1 X VA ET 1 10	MARINE STEP		90.549///	(giB)/(U)/B
の意味が、一般のない。	Minut Holy 175	A THE PROPERTY OF		TO THE PERSON AND PARTY.	STATE OF THE STATE			
Compound	Nakethed	A Meditines	Negation .	Average (F. Shall Missy Free P. Shall Shall B.	Substance Opticality	Substance
	A AHOBITAN		- Battkarennan	Emile of	E E SSON	K. H. W. G. Will & M. B. W. W. W. W. W.	Ligrams/mn	(d/libm//sec
Indeno(1.2.3-cd)nyrana	. 、。(mg/m)] 3次 1.75日.02	1 70 F 03	(mg/m²);		(IB://b.i.NEW)		ONC	ER.
Dibenz(a.h)anthracene	1.75E-02	1.785.02	1.01E-02	Q S	Q	ON		ND
Benzo(g,h,i)perylene	1.75E-02	1.78F-02	1.81E-02	Q V	2 2	QN .	QN	QN
SVOC Tentatively Identified Compounds (TICs)	mpounds (TICs		70.71.01	2	2	ON.	QN	QN
TO-13 (PAHS)		古山 一般の	To the second se	A	古 しんり はんかか		Street Section	
Naphthalene	1.47E-02	1.58E-02	1.18E-03	7.89E-09	9.20E-06	3.579E-06	6 050F-11	8 047C 07
Acenaphthylene	1.26E-03	1.09E-03	3.08E-05	6.36E-10	7.42E-07	2.887E-07	5.614F-12	7.217E-08
Acenaphthene	8.59E-05	6.58E-05	1.81E-05	4.22E-11	4.91E-08	1.912E-08	3 718E-13	4 790E OD
Fluorene	2.63E-04	2.31E-04	2.89E-05	1.23E-10	1.43E-07	5.577E-08	1.084F-12	4.7 OUE-09
Frenanthrene	2.80E-04	2.49E-04	5.25E-05	1.21E-10	1.41E-07	5,497E-08	1.069F-12	1.334E-00
Anthracene	3.86E-05	3.56E-05	4.16E-05	1.30E-13	1.52E-10	5.905E-11	1.148F-15	1.476E.11
Fluoranthene	2.45E-04	2.13E-04	1.81E-05	1.27E-10	1.48E-07	5.777E-08	1.123E-12	1 444F-08
Fyrene	4.03E-04	3.38E-04	1.81E-05	2.06E-10	2.40E-07	9.334E-08	1.815E-12	2.334F-08
Senzo(a)anthracene	3.51E-04	3.56E-04	1.81E-05	1.96E-10	2.28E-07	8.883E-08	1.727E-12	2.221E-08
Benzo/hylingranhone	3.15E-04	3.02E-04	1.81E-05	1.71E-10	2.00E-07	7.774E-08	1.512E-12	1.944E-08
Benzo(k)fluoranthone	4.21E-04	4.09E-04	1.81E-05	2.30E-10	2.68E-07	1.044E-07	2.030E-12	2.610E-08
Benzo(e)hvrene	2.80E-04	2.6/E-04	1.81E-05	1.52E-10	1.77E-07	6.886E-08	1.339E-12	1.721E-08
Benzo(a)byrene	3.86E-04	2 74E 04	1.81E-05	2.40E-10	2.80E-07	1.088E-07	2.116E-12	2.721E-08
Indeno(1,2,3-cd)pyrene	6.48F-04	8.74E-04	1.01E-03	2.11E-10	2.45E-07	9.551E-08	1.857E-12	2.388E-08
Dibenz(a,h)anthracene	8.24E-05	7 83E-05	1.01E-03	3.3/E-10	4.1/E-0/	1.621E-07	3.153E-12	4.053E-08
Benzo(a.h.i)perylene	7 71E-04	7 47E 04	1.016-03	4.400-11	3.ZUE-U8	2.021E-08	3.931E-13	5.053E-09
Energetics	7. 2 m	FO-TITE	-01E-03	4.21E-1			3.714E-12	4.775E-08
e	3 39	3 37E-03	NA CANA	2) 45	7	The state of the s	25.75	是一个人的人的人的人的人的人的人的人的人的人的人的人的人的人的人的人的人的人的人的
2-Nitrotoluene	3 305 03	2 275 02		2	QN.	QN	QN	QN
3-Nitrotoluene	3 305-03	3.37E 03	YZ Z	2	Q !	QN	ON	QN
4-Nitrotolijene	3 305 03	9 375 09	X 2		ON!	ND	QN	QN
Nitroalycerine	3 39:-03	3.37E 03	YZ Z	ON S	QN :	QN	QN	S
1.3-Dinitrohenzene	3 30 5 03	3.37E-03	YN.	Q.	Q	QN	QN	Q.
	0.336-00	3.37 E-U3	NA	QN	QN N	QN	ΩN	QN

	Number of Item N. Sirk	Cartridge 15,589 in Number of Items: *Triaj#itArESI NotExplosige Well NotExplosige Well NotExplosige Well	MEIBING M200. MENNEWEPT MENNEWEPT MESTIGALET	MAGAZARIJE) ATORI WAYEN I GIĞIK (USI) ÇEN	21/2/20 16.9 8956E04.7	No. of rounds (I) 7:11 [542] release duration (I) 7:11 [111] Unit Correst [14] [14] (UC)	11	roundky segonds (*) elfn((d)s)/ (*) ty) was as
Compound the Compound of the C	Trial #1 Measuled Addual	Measing of the control of the contro	Company Compan	Aditalia basing basing basing basing basing basing ba basing ba	AVEGEORY AUTHORISED SERVICE RICK	ToleliMass (II)	Substance Concentration (Grams/m)	Substance Emistibilitate Periodemisec
2,6-Dinitrotoluene	3.39E-03	3.37E-03	ĀN	QN	ΩN	QN	QN	QN
2,4-Dinitrotoluene	3.39E-03	3.37E-03	ΑN	Q	Q	QN	ND	QN
1,3,5-Trinitrobenzene	3.39E-03	3.37E-03	NA	QN	QN	QV.	QN	QN
2,4,6-Trinitrotoluene	3.39E-03	3.37E-03	NA	QN	QN	S	QV	QN
RDX	3.39E-03	3.37E-03	NA	QN	ND	QN	Q	QN
4-Amino-2,6-Dinitrotoluene	3.39E-03	3.37E-03	NA	ΩN	QN	QN	Q	QN
2-Amino-4,6-Dinitrotoluene	3.39E-03	3.37E-03	NA	ΩN	QN	ON	Q.	QN
Tetryl	3.39E-03	3.37E-03	NA	QN	QN	QN	2	Q
НМХ	6.78E-03	6.74E-03	ΑΝ	QN	QN	QN	Q	QN
Pentaerythritoltetranitrate	6.78E-03	6.74E-03	NA	ΩN	QN	QN	QN	QN
Dibutyl phthalate	1.70E-01	1.68E-01	NA	ΩN	QN	QN	QN	S
Dioctyl phthalate	1.70E-01	1.68E-01	NA	ΩN	QN	QN	QN	QN
Diphenylamine	8.48E-02	8.42E-02	NA	QΝ	ON	ON.	QN	ND
Footnotes:								

ATC = Aberdeen Test Center (for additional information on the data, refer to the Firing Point Emission Study)

NA = Not Applicable ND = Not Detected

APPENDIX C

HEALTH-BASED SCREENING LEVELS AND ACUTE TOXICITY VALUES

Values
Toxicity
and Acute 7
evels an
creening L
ı-Based S
∷ Healt
Appendix C

100 100				For the Chr	onic Evaluati	on (HBGI)						
Main the Chemide 768-73-9 Main		TE MENT	TIREGIOTESP		VERKNIKARA	Section (Contract)			For the Ac	ute Evaluati	on (ATV)	
1000cde (CO.) 124.39	TALL COMPBUING		1000							L'AEGL'	Soliton	SKIP.
Maintenance CO ₂ 1.086-401 1.046-402 1.046-402 1.046-402 1.046-402 1.046-402 1.046-402 1.046-402 1.046-401 1.046-402 1.046	ermanent Gases		The state of the s	Providence of the	1477. A.	M.S.O. 1974	A THOMAS				IT of E)	1, (10)m ³ ,
Divolde (CO)	nmonia (NH ₃)	7664-41-7	1.04E+02	2	104 20		11.0		-+			
NA 100E+04 NA 100E+04 NA 100E+04 NA 100E+04 NA 100E+05 100E+05 NA E 2 2 2 2 2 2 2 2 2	Carbon Dioxide (CO ₂)	124-38-9	¥	2	85.40 MA	ဥ	1.04E+02	1.75E+04		NA	Е	1.75E+04
Set Millogen (as NO) 10102-43-9 1,000E-02	arbon Monoxide (CO)	630-08-0	1.00F+04	, c			NA	¥	-	AN	F	5.40F+07
1,000-tile (SO_2) 7440-09-5 8,000-tile (SO_2) 1,000-tile (xides of Nitrogen (as NO)	10102-43-9	\perp	2 2	¥ \$		1.00E+04		_	¥	L	2 305.05
Bancholide	ulfur Dioxide (SO ₂)	7446-09-5		2 2	¥ ×		1.00E+02	ΑA	3.08E+04	¥	1	3.08F+04
Pain Hundride 7664-39-3 NA NA NA 160E+03 164E+03 NA E	Acid Gases			2	Y.		8.00E+01	7.89E+02		¥	Ш	7.89F+02
Pain chioride 7647-01-0 2.08E-01 nc 2.08E-101 nc 1.06E-101	drogen fluoride	7664-39-3	AN		2				_			20
19036-30-6 NA	drogen chloride	7647-01-0	2.08E+01	nc C	2 OBE 104	1	AN	1.60E+03	_	¥.	Ш	1.60F+03
Value Valu	drogen bromide	10035-10-6	辶		ANA NA	2	Z.U8E+01	4.50E+03	_	ΑΝ	ш	4.50F+03
Table Cyanide T664-38-2 1.04E+01 nc 1.06E+01 nc 1.04E+01 nc 1.04E+01 nc 1.04E+01 nc 1.06E+03 1.00E+03 nA T	tric Acid	7697-37-2	ΑN		ΔN		¥.	¥	9.93E+03	ΑN	-	9.93E+03
Section T664-93-9 NA	losphoric acid	7664-38-2	1.04E+01	nc	1.06F+01	000	NA VOTE	₹	2.58E+03	1.30E+03	A	1.30E+03
Second color S7-12-6 NA	iliuric Acid	7664-93-9	Ϋ́		AN	2	1048401	NA NA	3.00E+03	NA	-	3.00E+03
Stock of the Cyanida 57-12-5 NA 730E+01 nc 730E+01 NA 5.00E+03 NA T Stock of the Cyanida 74-90-8 3.13E+00 nc 3.13E+00 NA 5.17E+03 NA T Stock of the Cyanida 1.50E+01 nc NA NA NA NA NA NA Stock of the Cyanida 1.50E+01 nc NA 1.50E+01 NA NA NA NA Stock of the Cyanida 1.50E+01 nc NA 1.50E+01 NA 1.50E+03 NA T Stock of the Cyanida 1.50E+01 nc 1.40E+00 NA 1.50E+03 NA T Stock of the Cyanida 1.50E+01 nc 1.40E+00 NA 1.50E+03 NA T Stock of the Cyanida 1.50E+01 nc 1.40E+00 NA 1.50E+03 NA T Stock of the Cyanida 1.50E+01 nc 1.40E+02 NA 1.50E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.40E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.40E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.40E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.50E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.40E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.40E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.50E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.40E+03 NA T Stock of the Cyanida 1.50E+04 nc 1.50E+05 NA T Stock of the Cyanida 1.50E+05 nc 1.50E+05 NA T Stock of the Cyanida NA T Stock	anide						¥N.	2.00E+03	2.00E+03	NA	ш	2.00E+03
Secretary 14.90-8 3.13E+00 nc 3.14E+00 nc 3.13E+01 NA 5.00E+03 NA T Stylended Particulate 12789-66-1 5.00E+01 nc NA 5.00E+01 NA NA NA NA Stylended Particulate 12789-66-1 5.00E+01 nc NA 5.00E+01 NA NA NA NA Stylended Particulate 12789-66-1 5.00E+01 nc NA 1.50E+01 NA NA NA NA NA NA NA N	riculate Cyanide	57-12-5	ΨN		7 30E±01	3	7007					
12789-66-1 5.00E+01 nc NA 5.00E+01 NA 5.17E+03 NA T	drogen Cyanide	74-90-8	3.13E+00	nc	3.14F+00	2 2	7.30E+01	¥.	5.00E+03	NA	 -	5.00E+03
Spended Particulate 12789-66-1 5.00E+01 nc NA 5.00E+01 NA NA NA NA NA NA NA N	Ticulares					2	3.135+00	¥	5.17E+03	NA	⊢	5.17E+03
math f.00E+01 nc NA	al Suspended Particulate	12789-66-1	5.00E+01	5	¥		F 00E 104					
Image: Problem of the control of the contro	10		5.00E+01	2	AN	1	3.00E+01	A .	₹	NA		X X
Jum 7429-90-5 5.11E+00 nc 3.65E+00 nc 5.11E+00 nd NA NA NA NA TA 1y 7440-36-0 NA 1.46E+00 nc 5.11E+00 nd 1.46E+00 nd 1.46E+00 nA 1.50E+03 NA T 1x 7440-38-2 4.47E-04 c 4.15E-04 c 4.47E-04 NA 1.50E+03 NA T 1x 7440-39-3 5.21E-01 nc 5.1E-01 nd 1.50E+03 NA T 1x 7440-43-9 1.07E-03 c 7.45E-04 c 1.07E-03 NA T 1x 7440-47-3 NA 1.07E-03 NA 1.50E+03 NA 1.50E+03 NA 1 1x 7440-47-3 NA 1.50E+03 nA 1.50E+03 NA 1 1 1x 7440-48-4 NA 1.50E+03 NA 1.50E+03 NA 1 1x <	2.5		1.50E+01	2	S N	1	3.00E+01	AN	¥	N A		NA NA
Juny 7429-90-5 5.11E+00 nc 3.65E+00 nc 6.11E+00 NA 3.00E+04 NA T ηγ 7440-36-0 NA 1.46E+00 nc 1.46E+00 NA 1.50E+03 NA T π 7440-38-2 4.47E-04 c 4.15E-04 c 4.47E-04 NA 1.50E+03 NA T m 7440-39-3 5.21E-01 nc 7.45E-04 c 4.47E-04 NA 1.50E+03 NA T m 7440-43-9 1.07E-03 c 7.45E-04 c 1.07E-03 NA 1.50E+03 NA T n 7440-43-9 1.07E-03 c 9.94E-04 c 1.07E-03 NA 3.00E+01 NA T n 7440-43-9 1.07E-03 c 9.94E-04 c 1.53E-04 c 1.53E-04 nA 3.00E+04 NA 1.50E+03 NA 1.50E+03 NA 1.46E+02 NA 3.00E+04 NA <td>als</td> <td></td> <td></td> <td></td> <td>5</td> <td></td> <td>1.50E+01</td> <td>ΨN</td> <td>NA</td> <td>₹</td> <td></td> <td>₹Z</td>	als				5		1.50E+01	ΨN	NA	₹		₹Z
ny 7440-36-0 NA 1.46E+00 NA 3.00E+04 NA T 1 7440-38-2 4.47E-04 c 4.15E+00 nc 1.46E+00 NA 1.50E+03 NA T 1 7440-39-3 5.21E-01 nc 5.21E-01 nc 5.21E-01 NA 1.50E+03 NA T 1 7440-41-7 8.00E-04 c 7.45E-04 c 8.00E-04 NA 1.50E+03 NA T 1 7440-41-7 8.00E-04 c 7.45E-04 c 1.07E-03 NA 1.50E+03 NA T 1 7440-43-9 1.07E-03 c 9.94E-04 c 1.07E-03 NA 3.00E+01 NA T 1 7440-47-3 nA c 1.53E-04 c 1.53E-04 nA 1.50E+03 NA 1 1 7440-48-4 nA 1.46E+02 nA 1.50E+02 nA 1.50E+02 nA 1.50E+03 nA<	minum	7429-90-5	5.11E+00	2	3 65 = +00	2	7 11 1					
m 7440-38-2 4.47E-04 c 4.75E-04 c 4.47E-04 NA 1.50E+03 NA T m 7440-39-3 5.21E-01 nc 5.11E-01 nc 5.21E-01 NA 1.50E+03 NA T m 7440-41-7 8.00E-04 c 7.45E-04 c 8.00E-04 NA 1.50E+03 NA T n 7440-41-7 8.00E-04 c 7.45E-04 c 1.07E-03 NA 1.00E+01 NA T n 7440-43-9 1.07E-03 c 9.94E-04 c 1.07E-03 NA 3.00E+01 NA T n 7440-47-3 NA nA nA 3.00E+04 NA 1.50E+03 NA T n 7440-48-4 NA 1.50E+02 nC 1.46E+02 NA 3.00E+03 NA T n 7439-95-4 NA NA 1.50E+02 NA 1.50E+02 NA 1.50E+03 NA	imony	7440-36-0	ΑN		1 46E+00	2 6	5.11E+00	₹	3.00E+04	AN	 -	3.00E+04
m 7440-39-3 5.21E-01 nc 5.11E-01 nc 5.21E-01 NA 3.00E+01 NA T Im 7440-41-7 8.00E-04 c 7.45E-04 c 8.00E-04 NA 1.50E+03 NA T Im 7440-41-7 8.00E-04 c 7.45E-04 c 8.00E-04 NA 1.50E+00 NA T Im 7440-70-2 NA 0.0E-04 c 1.07E-03 NA 3.00E+01 NA T Im 7440-47-3 c 1.53E-04 c 1.53E-04 NA 1.50E+03 NA T A 7440-50-8 NA 1.46E+02 NA 1.50E+03 NA T Ium 7439-92-1 1.50E+00 nc 1.46E+02 NA 1.50E+03 NA T Ium 7439-96-5 5.11E-02 nc 1.50E+02 NA 1.50E+02 NA 1.50E+02 Ium 7439-96-5 5.11E-02 nc	enic	7440-38-2	4.47E-04	O	4 15F-04	2 0	1.46E+00	≰	1.50E+03	ΑN		1.50E+03
m 7440-41-7 8.00E-04 c 7.45E-04 c 8.00E-04 NA 1.50E+03 NA T Im 7440-43-9 1.07E-03 c 7.45E-04 c 1.07E-03 NA 5.00E+00 NA T Im 7440-43-9 1.07E-03 c 1.07E-03 NA 3.00E+01 NA T Im 7440-47-3 NA c 1.53E-04 c 1.53E-04 NA 3.00E+04 NA T Im 7440-48-4 NA 1.50E+02 nC 2.20E+02 NA 1.50E+03 NA T Im 7439-92-1 1.50E+00 nC 1.46E+02 NA 1.50E+03 NA T NA Ium 7439-95-4 NA NA 1.50E+02 NA 3.00E+03 NA T 1 Iese 7439-96-5 5.11E-02 nC 5.11E-02 NA 3.00E+04 NA T 2	ımı	7440-39-3	5.21E-01	2	5.11F-01	, 6	F 247 04	7	3.00E+01	ΑN		3.00E+01
1.0740-43-9 1.07E-03 C 9.94E-04 C 1.07E-03 NA 3.00E+00 NA T	Allium	7440-41-7	8.00E-04	O	7.45F-04	2 0	9.21E-01	1	1.50E+03	NA	-	1.50E+03
Jun 7440-70-2 NA NA 3.00E+01 NA T Jun 7440-47-3 C 1.53E-04 C 1.53E-04 NA 3.00E+04 NA T 7440-48-4 NA 2.20E+02 nC 2.20E+02 NA 1.50E+03 NA T 7430-92-1 1.50E+00 nC 1.46E+02 NA 1.50E+03 NA T ium 7439-95-4 NA NA 1.50E+02 NA 1.50E+03 NA T isse 7439-96-5 5.11E-02 nC 5.22E-02 NA 3.00E+04 NA T 2	mnim	7440-43-9	1.07E-03	O	9 94E-04	3 0	0.00E-04	¥	5.00E+00	NA	-	5.00E+00
Jum 7440-47-3 C 1.53E-04 C 1.53E-04 C 1.53E-04 NA 1.60E+03 NA T 7440-48-4 NA 2.20E+02 nC 2.20E+02 NA 1.50E+03 NA T 7430-92-1 1.50E+00 nC 1.46E+02 NA 1.50E+01 NA T ium 7439-95-4 NA NA NA 1.50E+02 NA 1.50E+02 ium 7439-96-5 5.11E-02 nC 5.22E-02 nC 5.11E-02 NA 3.00E+03 NA T	cium	7440-70-2	ΑN		NA	، اد	1.07E-03	₹	3.00E+01	ΑN	F	3.00F+01
7440-48-4 NA 2.20E+02 nC 2.20E+02 NA 1.50E+03 NA T 7440-50-8 NA 1.46E+02 nC 2.20E+02 NA 6.00E+01 NA T ium 7439-95-4 NA NA 1.50E+02 NA 1.50E+02 NA T iese 7439-96-5 5.11E-02 nC 5.22E-02 nC 5.11E-02 NA 3.00E+04 NA T	omium	7440-47-3		0	1 53E-04) c	NA	¥	3.00E+04	ΑΝ	-	3.00E+04
7440-50-8 NA 1.46E+02 nc 1.46E+02 NA 6.00E+01 NA T ium 7439-95-4 NA NA NA 1.50E+02 NA 3.00E+03 NA T iese 7439-96-5 5.11E-02 nc 5.22E-02 nc 5.11E-02 NA 3.00E+03 NA T	alt	7440-48-4	ΑN		2 20F±02	3 8	1.33E-U4		1.50E+03	NA	-	1.50E+03
7439-95-1 1.50E+00 nc NA 1.50E+02 NA 1.50E+03 NA T 7439-96-5 5.11E-02 nc 5.22E-02 nc 5.11E-02 NA 3.00E+03 NA T	per	7440-50-8	ΑN		1 46F±02	2 8	2.20E+02	7	6.00E+01	A A	-	6.00F+01
7439-96-5 5.11E-02 nc 5.22E-02 nc 5.11E-02 NA 1.50E+00 NA 1.50E+02 NA T	D	7439-92-1	1.50E+00	2	NA	2	1.46E+02	1	3.00E+03	AA	-	3.00E+03
7439-96-5 5.11E-02 nc 5.22E-02 nc 5.11E-02 NA 3.00E+04 NA T	nesium	7439-95-4	AN		Ç \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		1.50E+00		1.50E+02	ΑĀ	-	1.50E+02
3.00E+03 NA T	iganese	7439-96-5	5.11E-02	2	5.22E-02	٤	NA 141 00		3.00E+04	NA	\vdash	3.00E+04
		4			70	2	3.11E-02	٦	3.00E+03	AN		3.00E+03

				Regions FRES	Efficients Efficients				191	Source	
	7440-02-0	NA		7.30E+01	nc	7.30E+01	NA	3 00F+03	NA	4(1) Of 5/4	NAMES OF STREET
	7782-49-2	Ϋ́		1.83E+01	nc	1.83E+01	A N	6 00F+02	V V	- -	8.00E+03
	7740-22-4	NA		1.83E+01	nc	1.83E+01	¥.	3.00E+02	NAN	-	3 00E 102
	7440-28-0	ΑΝ		2.56E-01	nc	2.56E-01	N N	3.00E+02	AN	-	3 OOE 102
	7440-62-2	NA		2.56E+01	20	2.56E+01	ΑN	1.50E+02	AN	- -	1 FOE 102
	7440-66-6	ΑN		1.10E+03	nc	1.10E+03	Ą	3.00F+04	NAM	- -	2 005 102
										-	3.000
	20-00-0	1.48E-01	υ	1.39E-01	ပ	1.48E-01	1.23E+03	1.23E+03	NA	ш	1 23E±03
	75-07-0	8.73E-01	O	8.13E-01	υ	8.73E-01	1.80E+04	1.80E+04	¥	ш	1 80F+04
	67-64-1	3.65E+02	nc	3.65E+02	ou u	3.65E+02	ΑN	2.37E+06	¥.	1	2 37F+06
	107-02-8	2.09E-02	nc	2.08E-02	nc	2.09E-02	2.30E+02	2.29E+02	¥	. Ш	2.30F+02
Proprionaldehyde	123-38-6	NA		NA		ΑN	ΨN	7.50E+04	¥	-	7 50F +04
	4170-30-3	3.54E-03	ပ	3.30E-03	ပ	3.54E-03	5.72E+03	5.72E+03	NA NA	ш	5 72F+03
	123-72-8	NA		NA		ΑN	¥	7.38E+04	¥	-	7.38E+04
	100-52-7	3.65E+02	пc	3.65E+02	uc	3.65E+02	ΑN	1.50E+04	¥	-	1 50F+04
Isovaleraldehyde	590-86-3	ΑN		NA		AN	ΑN	¥	¥		¥
	110-62-3	¥		NA		ΨN	Ą	ΑN	¥		AN
o,m,p-Tolualdehyde	1334-78-7	AA		NA		ΑN	Ϋ́	¥	¥		¥
	66-25-1	NA		NA		ΝΑ	Ϋ́	¥	¥		AN
2,5-Dimethylbenzaldehyde	5779-94-2	NA		ΑN		ΑN	ΑΝ	¥	NA NA		NA
	115-07-1	ΝA		Ϋ́		AN	Ϋ́	¥.	AN		VIV
Dichlorodifluoromethane	75-71-8	2.09E+02	nc	1.83E+02	5L	2.09E+02	ΑN	1.48E+07		-	1 48F+07
Chlorodifluoromethane	75-45-6	5.11E+04	nc	5.11E+04	่วน	5.11E+04	ΑN	4.41E+06		 	4.41E+06
	76-14-2	ΝΑ		۸A		ΝA	ΑN	2.10E+07		-	2.10F+07
	74-87-3	1.07E+00	υ	1.79E+00	O	1.07E+00	ΝΑ	2.06E+05		-	2.06E+05
	/5-01-4	2.20E-02	o	2.10E-02	ပ	2.20E-02	ΑN	1.28E+04		F	1.28E+04
	106-99-0	3.74E-03	ပ	3.48E-03	ပ	3.74E-03	2.20E+04	2.21E+04		ш	2,20E+04
	74-83-9	5.21E+00	DC.	5.11E+00	nc	5.21E+00	Ϋ́	5.82E+04		_	5.82F+04
	75-00-3	2.32E+00	nc	ΝΑ		2.32E+00	Ϋ́	2.64E+06		-	2.64F+08
Dichlorofluoromethane	75-71-8	2.09E+02	υc	1.83E+02	nc	2.09E+02	Ϋ́	1.48E+07		-	1.48E+07
richlorofluoromethane	75-69-4	7.30E+02	nc	7.30E+02	nc	7.30E+02	ΑN	2.81E+06		-	2.81E+06
	109-66-0	ΑN		ΑN		NA		1.80E+06		F	1.80E+06
	107-02-8	2.09E-02	20	2.08E-02	nc	2.09E-02	2.30E+02	2.29E+02		ш	2.30E+02
1,1-Dichloroethene	75-35-4	5.21E+02		5 11E±02	2	2001					11001

			For the Ohro								
大学 人名	I The Scale	- SREWINGS		= 13	_			For the Acute Evaluation	te Evaluati	on (ATV)	
A The Combounding of the									VAE SILV	Source	A TV
		-	Action and the	2 145 .04		11/6ui/6H Ven	TOWN TO THE			(1.8) E	(mg/m)
Acetone	67-64-1	3.65E+02	2	3 REE 103		3.13E+04	Ϋ́	9.58E+06		⊢	9.58F+06
Methyl lodide	74-88-4	N N	2	S.COETUZ	DI.	3.65E+02	¥	2.37E+06		-	2.37F+06
Carbon Disulfide	75-15-0	7.30E+02	ú	7 305 103		¥N.	145000	1.45E+05		Ш	1.45E+05
Acetonitrile	75-05-8	6.20F+01	2 2	6.30E+02	nc	7.30E+02	¥	3.11E+04		L	3.11F+04
3-Chloropropene	107-05-1	1 04F+00	2 6	VI.	2	6.20E+01	WA	1.01E+05		-	1 01E+05
Methylene Chloride	75-09-2	4 09F+00	2 0	NA 2707 C		1.04E+00	9.39E+03	9.39E+03		ш	9 39E+03
tert-Butyl Alcohol	75-65-0	AN	,	3.78E+00	٥	4.09E+00	000969	6.94E+05		Ш	6 96F+05
Acrylonitrile	107-13-1	2 R3E-02	,	NA 7		ΑΝ	NA	4.55E+05		-	4 55E+05
trans-1,2-Dichloroethene	156-60-5	7.30F+01	, 6	Z.01E-02	٥	2.83E-02	21700	2.17E+04		ш	2 17F+04
Methyl t-Butyl Ether	1634-04-4	3 135+03	2 2	7.305+01	2	7.30E+01	ΥN	4.95E+04		-	4 95E+04
Hexane	110-54-3	2 09E+02	2 8	3.13E+03	ည	3.13E+03	NA	4.32E+05		-	4 32F+0F
1,1-Dichloroethane	75-34-3	5.21E+02	2 6	Z.U8E+UZ	2	2.09E+02	NA	5.28E+05		-	5 28F+05
Vinyl Acetate	108-05-4	2 09F±02	2 6	3.115+02	ည	5.21E+02	۷Ą	1.21E+06		-	1 21E+06
cis-1,2-Dichloroethene	156-59-2	3.65F+01	2 6	Z.U8E+UZ	ည	2.09E+02	19150	1.76E+04		Ш	1 92F+04
2-Butanone	78-03-3	1 045,00	2	3.05=+01	2	3.65E+01	ΑΝ	7.92E+05		-	7 025 105
Ethyl Acetate	141-78-B	3 20E ±03	2	1.04E+03	nc	1.04E+03	NA	8.85E+05		- -	8 85E+05
Methyl Acrylate	96-33-3	1 10E+03	2 2	3.29E+03	20	3.29E+03	AN	1.44E+06		- -	1 44E+08
Chloroform	67-66-3	8 35E 02	2 ,	1.10E+02	ဍ	1.10E+02	ΑN	AN AN			001-110
1,1,1-Trichloroethane	71-55-6	1 04F+03	J 2	7.73E-02	O	8.35E-02	NA	9.76E+03		-	9 76F±03
Carbon Tetrachloride	56-23-5	1 28E-04	2 0	Z.30E+03	2	1.04E+03	1.94E+06	1.91E+06			1 04E+06
1,2-Dichloroethane	107-06-2	7 39E-02	ပ (1.18E-01	O	1.28E-01	1.28E+05	1.26E+05		1 4	1 285 105
Benzene	71-43-2	2 49F-01	5 0	0.88E-02	0	7.39E-02	NA	8.08E+03			8 08F+03
Isooctane (2,2,4-trimethylpen)	540-84-1	NA	,	4. 10E-UI	ပ	2.49E-01	1.56E+05	1.60E+05		Ш	1 56F+05
Heptane	142-82-5	¥		Ç <		¥.	₹	3.50E+05		i	3,50E+05
Trichloroethane	71-55-6	1.04E+03	50	2 30E±03	9	NA	ΑN	1.80E+06		F	1.80E+06
Ethyl Acrylate	140-88-5	1.40E-01	2 0	Z:OOL 103	2	1.04E+03	1.94E+06	1.91E+06		ш	1.94E+06
1,2-Dichloropropane	78-87-5	9.89E-02	, .	9 21E.02		1.40E-01	₹ Z	6.14E+04		—	6.14E+04
Methyl Methacrylate	80-62-6	7.30E+02	2	7 305 402	ا د	9.89E-02	Y V	5.08E+05		-	5.08E+05
Dibromomethane	74-95-3	3.65E+01		3 855-104	2	7.30E+02	A A	4.09E+05		-	4.09F+05
1,4-Dioxane	123-91-1	6.11E-01		5.00L 101	2	3.65E+01		2.50E+05		-	2.50F+05
Bromodichloromethane	75-27-4	1.08E-01	0	101E 01	اد	6.11E-01		9.00E+04		-	9.00E+04
4-Methyl-2-Pentanone	108-10-1	8.34E+01	1	7 30E±01	υ <u> </u>	1.08E-01		4.00E+03		-	4,00E+03
Toluene	108-88-3	4.02E+02	1	4 16F±02	2 2	8.34E+01		3.07E+05		-	3.07E+05
Octane	111-65-9	NA	\dagger	NA	2	4.02E+02	<u>양</u>	1.89E+05		Ш	1.88E+05
				٠ <u>٠</u>		AA	¥ Ž	ΑN) \ \\

			For the Chro	For the Chronic Evaluation (HBSL	on (HBSL)			For the Aci	For the Acute Evaluation (ATV)	10 /ATVA	
	ink As	Region 9	Toxicipe	Rubletta	P J OXICITY				数表示		H. Charles
SOME WITH STATE OF			(Teen of		(Corner)					Source or Er	
trans-1,3-Dichloropropene	Ψ١	5.17E-02	ပ	4.82E-02		5.17E-02	NA	1	4	27.02.1 27.00	4
Ethyl Methacrylate	97-63-2	3.29E+02	nc	3.29E+02	nc	3.29E+02	ΝΑ	NA NA			NA NA
1,1,2-I richloroethane	79-00-5	1.20E-01	S	1.12E-01	ပ	1.20E-01	ΝA	1.64E+05		T	1.64E+05
letrachloroethene	127-18-4	3.31E+00	U	3.13E+00	υ	3.31E+00	NA	6.78E+05		L	6.78E+05
z-Hexanone	591-78-6	ΑΝ		5.11E+00	nc	5.11E+00	ΑN	4.09E+04		7	4.09E+04
Uibromochloromethane	124-48-1	8.00E-02	υ	7.45E-02	ပ	8.00E-02	Ϋ́	6.00E+03		Ţ	6.00E+03
1,2-Dibromoethane	106-93-4	8.73E-03	υ	8.24E-03	၁	8.73E-03	NA A	1.54E+05		_	1.54F+05
Chlorobenzene	108-90-7	6.21E+01	nc	6.21E+01	วน	6.21E+01	Ā	1.38E+05		_	138F+05
1,1,1,2-Tetrachloroethane	630-20-6	2.60E-01	ပ	2.41E-01	υ	2.60E-01	ΑN	5.15E+04		-	5.15E+04
Ethylbenzene	100-41-4	1.06E+03	nc	1.06E+03	nc	1.06E+03	Ą	5.43E+05		_	5.43F+05
m&p-Xylene	108-38-3 106-42-3	7.30E+02	nc	7.30E+03	nc	7.30E+02	ΝΑ	6.51E+05		<u> </u>	6.51E+05
o-Xylene	95-47-6	7.30E+02	JC	7.30E+03	nc	7.30E+02	¥	6.51E+05		F	6.51E+05
Styrene	100-42-5	1.06E+03	nc	1.04E+03	ou	1.06E+03	2.13E+05	2.13E+05		ш	2.13E+05
Bromoform	75-25-2	1.75E+00	O	1.61E+00	၁	1.75E+00	NA N	6.20E+03		-	6.20E+03
Cumene	98-82-8	4.02E+02	пС	4.02E+02	nc	4.02E+02	NA	2.46E+05		-	2.46E+05
1,1,2,2-1 etrachioroethane	/9-34-5	3.31E-02	O	3.13E-02	υ	3.31E-02	NA	2.06E+04		-	2.06E+04
1,2,3-I richloropropane	96-18-4	9.61E-04	O	3.13E-03	ပ	9.61E-04	NA	6.03E+04		1	6.03E+04
Bromobenzene	108-86-1	1.04E+01	ဥ	NA		1.04E+01	NA	4.82E+04		L	4.82E+04
4-Einyitoiuene	8-96-229	ΨV		ΑΝ		NA	AN	1.25E+05		L	1.25E+05
1,3,5-1 rimethylbenzene	108-67-8	6.21E+00	nc	6.21E+00	nc	6.21E+00	NA	3.68E+05		-	3.68E+05
Alpha Methyl Styrene	98-83-9	Z.56E+02	2	2.56E+02	nc	2.56E+02	NA	NA			ΑN
1,z,4-1 rimetnyibenzene	95-63-6	6.21E+00	20	6.21E+00	nc	6.21E+00	NA	1.80E+05		-	1.80E+05
1,3-Dichlorobenzene	341-73-1	3.29E+00	22	3.29E+00	20	3.29E+00	Ϋ́	3.61E+04		F	3.61E+04
Popul Chlorida	100-40-7	3.00E-01	٥	2.85E-01	o	3.06E-01		6.61E+05		Τ	6.61E+05
2 Oloblosoborzono	100-44-7	3.90E-02	υ	3.68E-02	٥	3.96E-02	5.20E+03	5.17E+03		В	5.20E+03
i,z-Dicilioloberizerie	1-00-08	Z.U9E+02	ဥ	3.29E+01	22	2.09E+02	ΝA	3.01E+05		L	3.01E+05
Hexachiorethane	67-72-1	4.80E-01	υ	4.47E-01	O	4.80E-01	NA	2.90E+04		⊢	2.90E+04
1,z,4-i ricniorobenzene	120-82-1	2.08E+02	ည	2.08E+02	ပ	2.08E+02	NA	3.71E+04		-	3.71E+04
Hexachiorobutadiene	87-68-3	8.73E-02	υ	8.03E-02	O	8.73E-02	3.21E+04	3.20E+04		Ш	3.21E+04
Highocarbone											
nydiocarpons	3 3 3 7										
Wetnane	74-82-8	¥Z		ΑN		NA	NA	3.30E+06		F	3.30E+06
Etnylene	74-85-1	ΑΝ		NA A		NA	ΑN	4.60E+05		L	4.60E+05
Acetylene	74-86-2	Z V		NA		NA	Ϋ́	¥			NA

100 to 10			For the Ch	- 1 2 2 2 2 2							
The state of the s	1.5.4.1.1	LARAMIANDE		of the Cittoric Evaluation (HBSL	ion (HBSL)		L	For the A			
The building of the second	1018 I	A PRICE		Keglon 3	Willoxidity.	A WAY WEST SALES A	A STANSFARE	or tile Ac	of tile Acute Evaluation (ATV	ion (ATV)	
					Endboln				VA EGI		
Dronder	74-84-0	NA	Y A CHARLES AND A CHARLES	W. W. Santa	K (Cibitud)						
Propylene	115-07-1	ΑN		¥ S		Ϋ́	Ϋ́	NA NA	177 SOJ 3200	(410)(7	. ('mg/m') ; ;
Describe	74-98-6	¥		¥		ΑN	¥	ΔN			NA
Propyne (methyl acetylene)	74-99-7	ΝΑ		¥.		A A	V V	3 70 = 100			Ϋ́
Isobutane	75-28-5	C A		ΑN		¥		3.70E+U6		F	3.78E+06
1-Butene/Isobutylene (115-1	-	5 5		Ϋ́Α		AN		2.79E+06		}- -	2.79E+06
	+	Y		ΑN		N N	≨ :	9.52E+05		-	9 525-05
cis-butene	25167.67.9	3.74E-03	O	3.48E-03	o	3 74E 02	A S	\rightarrow		-	6 87F+0g
1-Butyne	407.00	Ϋ́		AA		0.74E-03	Z.Z0E+04	-4		Ш	2 205 104
trans-Butene	9-00-707	NA A		AN		¥ i	₹	1.72E+04	¥	1 -	4 70F : 0 :
2-Butyne (crotopylone)	25167-67-3	NA		ΑN		¥	¥	ΑN			1.12=+04
n-Pentana	503-17-3	AM		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		Y.	ΑN	1.72F±04	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		NA A
n-rentane	109-66-0	¥		Y S		ΝΑ	AN A	NA	¥	-	1.72E+04
il-ilexane	110-54-3	2 10F±02		Y S		A A	AN	1 805 1 00			Ϋ́
SVOCS		70.70	2	Z.08E+02	nc	2.10E+02	NA	1.00C±00		-	1.80E+06
n-nitrosodimethylamine	62.75.0	1 275 01					٤	3.28E+U5		<u></u>	5.28E+05
bis(2-chloroethyl)ether	111 44 4	1.3/E-U4	O	1.23E-04	c	1 37E 04					
phenol	1000	5.82E-03	ပ	5.69E-03	٥	F 07 E 07	¥.	2.50E+03		-	2 505103
2-chlorophenol	7-CS-00)	2.19E+03	nc	2.19E+03	2	3.02E-U3	ΝA	5.85E+04		-	E 05 T : 0 4
1 3-Dichlorobon-	95-57-8	1.83E+01	2	1 83E±04	2	Z.19E+03	ΑN	3.85E+04	1	- -	3.85E+04
1 4 dishloss	541-73-1	3.29E+00	2	3 20 1 00	ည	1.83E+01	¥	5.25F+03	1	- ,	3.85E+04
1,4-diciliorobenzene	106-46-7	3.06E-01	2 (3.29E+00	пС	3.29E+00	Ą	3 64 5 104			5.25E+03
1,2-dichlorobenzene	95-50-1	2.09F+02	ا د	Z.85E-01	ပ	3.06E-01	ΔN	3.01E+04		-	3.61E+04
Denzyl alcohol	100-51-6	1 10F±03	2	3.29E+01	ဥ	2.09E+02	V V	0.015+05		 -	6.61E+05
DIS(2-chloroisopropyl)ether	108-60-1	1 025 04	2	1.10E+03	5	1.10E+03		3.01=+05	-	ı	3.01E+05
2-methylphenol	95-48-7	1 825-101	٥	1.79E-01	ပ	1.92E-01	٤٤	5.53E+04		⊢	5.53E+04
hexachloroethane	67-72.1	1.03E+02	JC	1.83E+02	55	1 83E+02	¥ .	6.99E+04		 -	6.99F+04
n-nitroso-di-n-propylamine	+	4.00E-01	٥	4.47E-01	O	4 80E-01	1	NA V			NA
4-methylphenol	+	9.01E-U4	υ	8.94E-04	C	0 845 04	1	Z.90E+04		-	2 90E+04
nitrobenzene	+	1.83E+02	nc	1.83E+02	12	4 82 1.04	1	2.00E+02		+	2 005-00
isophorone	20-83-3	Z.09E+00	nc	2.19E+00		200E-02	¥.	ΑA			MA
2-nitrophenol	+	7.08E+00	υ	6.59E+00		2.09E+00		1.51E+04		1	2 1 2
2 d.dimothylate	88-75-5	¥.		N V	3	7.08E+00	×××	2.83F+04	-	-	1.315+04
bis(2-chloroeth		7.30E+01	2	7 305 104		NA		AN	+	-	2.83E+04
24 di moroemoxy/methane	111-91-1	4N	\dagger	-30E-101	ဥ	7.30E+01	AN AN	VIV			N A
4,4-dichlorophenol	+	1.10F+01	1	AN I		ΑN	¥ Z	<u> </u>	1		NA
', z, 4-trichlorobenzene	╀	2.08F+02	1	1.10E+01	nc	1.10E+01	\dagger	200			AN AN
naphthalene	+	3 135+00	7	2.08E+02	nc	2.08E+02	\dagger	3.00E+04	-	⊢	3.00E+04
	\dashv	13E TOO	nc S	.29E+00	5	3.13F+00	1	3.71E+04		1	3.71E+04
						20	Y WA	7.86E+04		1	7 BGE 104
											100 L 104

			For the Chronic Evaluation (HBSL	nic Evaluatio	in (HBSL)			For the Acute Evaluation (ATV)	e Evaluati	on (ATV)	
The Confident	8.0		Endesilit		ficebolts (cebule)						
	106-47-8	1.46E+01	nc	1.46E+01	nc	1.46E+01		3.00E+04		T	3.00E+04
hexachlorobutadiene	87-68-3	8.62E-02	၁	8.03E-02	C	8.62E-02	3.21E+04	3,20E+04		Ш	3.21E+04
4-chloro-3-methylphenol	59-50-7	NA		NA		NA	NA	2.00E+04		 - -	2.00E+04
2-methylnaphthalene	91-57-6	AN		7.30E+01	nc	7.30E+01	NA	2.00E+04		⊢	2.00E+04
hexachlorocyclopentadiene	77-47-4	7.30E-02	nc	7.30E-02	nc	7.30E-02	NA	2.23E+02		Τ	2.23E+02
2,4,6-trichlorophenol	88-06-2	1.10E+02	nc	1.10E+02	nc	1.10E+02	ΑN	3.00E+04		⊥	3.00E+04
2,4,5-trichlorophenol	95-95-4	3.65E+02	nc	3.65E+02	nc	3.65E+02	NA	3.00E+04		Τ	3.00E+04
2-chloronaphthalene	91-58-7	2.92E+02	nc	2.92E+02	nc	2.92E+02	ΝΑ	6.00E+02		Т	6.00E+02
2-nitroaniline	88-74-4	2.09E-01	nc	2.08E-01	nc	2.09E-01	NA	Ν			NA
Acenaphthylene	208-96-8	NA		NA		NA	NA	2.00E+02		⊥	2.00E+02
dimethylphthalate	131-11-3	3.65E+04	nc	3.65E+04	nc	3.65E+04	NA	1.50E+04		Т	1.50E+04
2,6-dinitrotoluene	606-20-2	3.65E+00	nc	3.65E+00	nc	3.65E+00	NA	6.00E+02		Τ	6.00E+02
acenaphthene	83-32-9	2.19E+02	nc	2.19E+02	nc	2.19E+02	NA	1.25E+03		Т	1.25E+03
3-nitroaniline	99-09-2	ΑN		NA		NA	NA	NA			ΝA
2,4-dinitrophenol	51-28-5	7.30E+00	J.	7.30E+00	nc	7.30E+00	NA	7.50E+03		T	7.50E+03
dibenzofuran	132-64-9	1.46E+01	nc	1.46E+01	nc	1.46E+01	NA	NA			NA
2,4-dinitrotoluene	121-14-2	7.30E+00	nc	7.30E+00	nc	7.30E+00	ΝΑ	6.00E+02		Т	6.00E+02
4-nitrophenol	100-02-7	2.92E+01	nc	2.92E+01	ou	2.92E+01	NA	3.00E+04		T	3.00E+04
Fluorene	86-73-7	1.46E+02	nc	1.46E+02	่วน	1.46E+02	NA	7.50E+04		Τ	7.50E+04
4-chlorophenyl-phenylether	7005-72-3	NA		NA		NA	NA	NA			NA
diethylphthalate	84-66-2	2.92E+03	nc	2.92E+03	่วน	2.92E+03	NA	1.50E+04		T	1.50E+04
4-nitroaniline	100-01-6	ΑN		NA		NA	NA	9.00E+03		1	9.00E+03
4,6-dinitro-2-methylphenol	534-52-1	NA		3.65E-01	uc	3.65E-01	NA	5.00E+02		1	5.00E+02
n-nitrosodiphenylamine(1)	9-06-98	1.37E+00	ပ	1.28E+00	ပ	1.37E+00	Ϋ́	ΑN			ΑΝ
4-bromophenyl-phenylether	101-55-3	NA		NA		NA	AN	ΝΑ			NA
hexachlorobenzene	118-74-1	4.18E-03	၁	3.91E-03	၁	4.18E-03	NA	7.50E+01		Τ	7.50E+01
pentachlorophenol	9-98-28	5.60E-02	၁	5.22E-02	ပ	5.60E-02	NA	1.50E+03		Ţ	1.50E+03
phenanthrene	85-01-8	NA		NA		NA	NA	2.00E+03		⊢	2.00E+03
anthracene	120-12-7	1.10E+03	uc	1.10E+03	nc	1.10E+03	NA	6.00E+03		⊥	6.00E+03
di-n-butylphthalate	84-74-2	3.65E+02	nc	3.65E+02	nc	3.65E+02	NA	1.50E+04		L	1.50E+04
fluoranthene	206-44-0	1.46E+02	nc	1.46E+02	nc	1.46E+02	ΑN	3.00E+01		⊢	3.00E+01
pyrene	129-00-0	1.10E+02	nc	1.10E+02	ဥ	1.10E+02	¥	1.50E+04		⊢	1.50E+04
butylbenzylphthalate	85-68-7	7.30E+02	DC	7.30E+02	nc	7.30E+02	AA	5.00E+05		⊢	5.00E+05
benzo(a)anthracene	56-55-3	2.17E-02	υ	8.58E-03	U	2.17E-02	AN	6.00E+02		⊢	6.00E+02
chrysene	218-01-9	2.17E+00	U	8.58E-01	٥	2.17E+00	AN N	2.00E+02		_	2.00E+02

			For the Chr	For the Chronic Evaluation (HBS)	(logh) uo						
] .	17.	-Regionis-		Dealor of	Oil (HBSL)			For the Acute Evaluation (ATV	e Evaluatio	n (ATV)	
Section 1	OAS#		Engle	N RECIE	E HOUSE	A HBSLA			MAEGL.	Source	ATV
3,3-dichlorobenzidine	91-94-1		WAS STATE	1 305 00	Month of the	2.1.1.192.13.13.	(LODYGHID)	. 7.1			(na/m)
bis(2-ethylhexyl)phthalate	117-81-7	4.80F-01	, ,	4.7F 04	0	1.50E-02	NA	6.21E+03	-		6 21E103
di-n-octylphthalate	117-84-0	7.30E+01	2 5	7.905.04	O	4.80E-01	Ν	1.00E+04	-	-	1 00E+04
benzo(b)fluoranthene	205-99-2	2 17F-02	2	1.305+01	JC	7.30E+01	NA	1.50E+05		-	1 50E 105
benzo(k)fluoranthene	207-08-9	2.17F-01	ی د	8.58E-U3	O	2.17E-02	NA	¥N	-		NA TOP
benzo(a)pyrene	50-32-8	2 17E-03	٥	0.36E-02	O	2.17E-01	NA	ΑN			2 2
indeno(1,2,3-cd)pyrene	193-30-5	2 175 00	اد	Z.UZE-U3	ပ	2.17E-03	Α	7.50E+03		-	14A
dibenz(a,h)anthracene	53-70-3	2 17E-02	٥	8.58E-03	ပ	2.17E-02	ΑN	Ž		-	7.50E+03
benzo(g,h,i)perylene	191-24-2	NA NA	3	8.58E-04	ပ	2.17E-03	Ϋ́	3.00E+04		-	NA 2005
				ΑN		ΝΑ	ΑĀ	3.00E+04		- -	3.005+04
TO-13 (PAHS)										-	3.005704
naphthalene	91-20-3	3.13F+00	0	2001							
acenaphthylene	208-96-8	¥.	2	3.29E+00	20	3.13E+00	AA	7.86E+04			7 RGE+04
Acenaphthene	83-32-9	2.19E+02	Ç	2 405.00		AN NA	NA	2.00E+02	-	-	2 00E+02
fluorene	86-73-7	1 46E±02	2 6	4.19E+02	22	2.19E+02	NA	1.25E+03		- -	1.00E+02
phenanthrene	85-01-R	NA VIV	3	1.40E+02	ဥ	1.46E+02	¥	7.50E+04		- -	7.505.03
anthracene	120-12-7	1 105.00		ΨV		ΑN	¥	2.00E+03	-	- -	7.50E+04
fluoranthene	206.44.0	4 46T-03	ဍ	1.10E+03	ည	1.10E+03	¥	6.00F+03	1	- -	Z.UUE+03
pyrene	120 00 0	1.40E+02	ဥ	1.46E+02	пс	1.46E+02	¥	3 00E±01	1	- +	6.00E+03
benzo(a)anthracene	0-00-671	1. IOE+02	20	1.10E+02	2	1.10E+02	ΔN	1 505.00		-	3.00E+01
chrysana	5-62-96	2.17E-02	υ	8.58E-03	O	2.17F-02	Ç 4	1.30E+04		-	1.50E+04
henzo(h)(horanthana	218-01-9	2.17E+00	ပ	8.58E-01	O	2.17F+00	Ş	9.00E+02		-	6.00E+02
henzo(k)(lipranthono	202-89-2	2.17E-02	ပ	8.58E-03	o	2.17F-02	2 2	Z.UUE+UZ		-	2.00E+02
Benzo(a)nyrana	6-80-702	2.17E-01	ပ	8.58E-02	0	2.17E-01		Z .			NA
honzo(e)hylelle	192-97-2	NA		¥			5 5	¥N.			N A
indeno(1.2.3.4)	50-32-8	2.17E-03	υ	2.02E-03	C	2 17E 03	¥	NA	ΑA		NA
diberz(a h)anth	193-39-5	2.17E-02	υ	8.58E-03	C	2 17E-02	\$ 2	7.50E+03		<u>-</u>	7.50E+03
horzo(a h Dromit	53-70-3	2.17E-03	ပ	8.58E-04	C	2 17E 03	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	NA			NA
Olivi) peryiene	191-24-2	ΑΝ		AN		20-11	<u> </u>	3.UUE+U4		-	3.00E+04
						5	₹	3.00E+04		F	3.00E+04
437.8-1 etrachlorodibenzo-p-diox	1746-01-6	4.48E-08	o	4.17E-08	,	4 40 = 00					
123/79 U	10321-76-4	NA		¥Z	,	NA NA	¥ S	3.50E+00		⊥	3.50E+00
123-19-Hexacillorodibenzo-p-dip39227-28-6	39227-28-6	Ϋ́		AN		5	¥	2.50E+00		F	2.50E+00
1236/8-Hexachlorodibenzo-p-dip57653-85-7	7.653-85-7	ΑN		ΔN		ΨZ.	¥	NA		-	AN
123/89-Hexachlorodibenzo-p-dib19408-74-3	9408-74-3	1.48E-06	C	1 38E-06	1	AN.	¥	1.50E+01		-	1.50F+01
1234678-Heptachlorodibenzo-p-135822-46-9	15822-46-9	NA	,	NA NA	٥	1.48E-06	¥	NA		\mid	AN
			-	- VX1	1	AN	Α	ΑN	-	+	NAM

12378-Heaterbloodberzo-p-luf 5174-1-4-9								•		י מים שלים בי מותמומות לאו א		
NA NA NA 1,50E+02 NA NA NA 1,50E+02 NA NA NA NA NA NA NA NA NA NA NA 7,50E+00 NA NA NA 7,50E+00 NA NA NA 7,50E+00 NA NA NA NA NA	Company of the Compan		Regions I	ELHBOURT (COMIC).		Entition Section Secti	THESC.				10 (G	A TV
NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA 7.50E-02 NA NA NA 7.50E-02 NA NA NA NA 3.65E+01 NA NA NA 3.65E+01 NA 3.06E+01 NA 3.65E+01 NA NA NA 3.65E+01 NA 3.06E+01 NA 3.65E+01 NA 3.06E+01 NA 3.06E+01 NA 3.06E+01 NA 3.06E+01 </td <td>ocpp</td> <td>3268-87-9</td> <td>NA</td> <td></td> <td>AN AN</td> <td></td> <td>NA</td> <td>ΑĀ</td> <td>1.50E+02</td> <td></td> <td>T</td> <td>1.50E+02</td>	ocpp	3268-87-9	NA		AN AN		NA	ΑĀ	1.50E+02		T	1.50E+02
NA NA NA NA NA NA NA NA NA NA NA NA NA 7.50E-00 NA NA NA NA 3.65E+01 NA NA NA 3.65E+01 NC 3.65E+01 NA 3.06E+02 3.65E+01 NC 3.65E+01 NA 3.06E+02 3.65E+01 NC 3.65E+01 NA 3.06E+02 3.65E+01 NC 3.65E+01 NA<	2378-Tetrachlorodibenzo-p-furan	51207-31-9	NA		NA		NA	ΑĀ	2.00E+00		-	2.00E+00
NA NA NA 7.50E-02 NA NA NA 7.50E-00 NA NA NA 7.50E-00 NA NA NA NA 3.65E+01 NA 1.51E+04 3.65E+01 NA 1.51E+04 3.65E+01 NA 1.51E+04 3.65E+01 NA 3.65E+01 3.65E+01 NA 3.65E+01 <t< td=""><td>12378-Pentachlorodibenzo-p-fura</td><td>67117-41-6</td><td>NA</td><td></td><td>NA</td><td></td><td>NA</td><td>¥</td><td>Ν</td><td></td><td></td><td>¥</td></t<>	12378-Pentachlorodibenzo-p-fura	67117-41-6	NA		NA		NA	¥	Ν			¥
NA NA NA NA 7.50E+00 NA NA NA NA NA 3.65E+01 NA NA 1.51E+04 NA 3.65E+01 NC 2.19E+00 NC 3.65E+01 NA NA 3.65E+01 NC 3.65E+01 NA NA NA NA 4.80E-01 NC 3.65E+01 NA 3.00E+02 NA 3.00E+02 4.80E-01 NC 3.65E+01 NA 3.00E+02 NA NA	23478-Pentachlorodibenzo-o-fura	67117-31-4	NA		NA		NA	ΑN	7.50E-02		T	7.50E-02
Fleazachlorodibenzo-p-lu 57117-44-9 NA NA NA NA NA NA NA N	123478-Hexachlorodibenzo-p-fur	70648-26-9	NA		NA		NA	NA	7.50E+00		۲	7.50E+00
Hexachlorodibenzo-p-fuj 72918-21-9 NA	123678-Hexachlorodibenzo-p-fu	57117-44-9	NA		ΝΑ		NA	Ν			_	2.50E+00
Parachlocodibenzo-p-16/76081-34-5 NA NA NA NA NA NA NA N	123789-Hexachlorodibenzo-p-fur	72918-21-9	NA		NA		NA	Α¥	A			ΑÑ
18. Heptachlorodibenzo-p- (67562-39-4) NA	234678-Hexachlorodibenzo-p-fur	60851-34-5	NA		NA		NA	ΑÑ	1.50E+00		_	1.50E+00
99-Heptachlorodibenzo-p-56673-89-7 NA NA NA NA NA 99-Heptachlorodibenzo-p-56673-80-7 NA NA NA NA NA 90-1-05-0 NA NA NA NA NA NA elles morane 98-95-3 2.09E+00 nc 2.19E+00 nc 2.09E+01 nc 3.65E+01 nc 1.51E+04 toluene 99-08-1 3.65E+01 nc 3.06E+02 nc 3.06E+02 nc 3.06E+02 nc 3.06E+02 nc 3.06E+02 nc 3.06E+02	1234678-Heptachlorodibenzo-p-	67562-39-4	NA		NA		NA	NA	NA			₹
etics NA NA NA NA 3.00E+02 nuscane 98-95-3 2.09E+00 nc 2.19E+00 nc 3.65E+01 nc 3.65E+01 NA 1.51E+04 olduene 98-95-3 3.65E+01 nc 3.00E+02 nc 3.00E+02 nitrotoluene 112-14-2 7.30E+00 nc 7.30E+01 nc 2.24E-01	39-Heptachlorodibenzo-p-	55673-89-7	NA NA		NA		NA	NA	NA			¥
98-95-3 2.09E+00 nc 2.19E+00 nc 3.65E+01 NA 1.51E+04 88-72-2 3.65E+01 nc 3.65E+01 NA NA NA 99-08-1 3.65E+01 nc 3.65E+01 nA 3.07E+04 99-08-1 3.65E+01 nc 3.65E+01 nA NA 2ane 99-08-0 3.65E+01 nc 3.65E+01 nA NA 2ane 99-08-0 3.65E+01 nc 4.47E-01 nc 4.47E-01 NA NA 2ane 99-08-0 3.65E+01 nc 4.47E-01 nc 4.47E-01 NA 3.00E+02 enae 606-20-2 3.65E+00 nc 3.65E+00 nc 4.47E-01 NA 3.00E+02 uene 12-14-2 7.30E+00 nc 7.30E+00 nc 7.30E+00 NA 3.00E+02 sultivolulume 118-96-7 2.24E-01 nc 2.24E-01 NA NA NA sinitrololulume		39001-02-0	NA		NA		NA	ΝA	3.00E+02		ı	3.00E+02
98-95-3 2.09E+00 nc 2.19E+00 nc 2.09E+01 nc 3.65E+01	Energetics											
88-72-2 3.65E+01 nc 3.65E+01 nc 3.65E+01 NA NA 99-08-1 3.65E+01 nc 7.30E+01 nc 3.65E+01 NA NA 99-08-1 3.65E+01 nc 3.65E+01 nA 3.37E+04 n sene 99-99-0 3.65E+01 nc 3.65E+01 nA 3.00E+03 sene 99-65-0 3.65E-01 nc 3.65E+01 nA 3.00E+03 ene 606-20-2 3.65E-01 nc 3.65E+01 nA 3.00E+02 uene 121-14-2 7.30E+00 nc 7.30E+00 nc 7.30E+00 NA 3.00E+02 slentene 99-35-4 1.10E+02 nc 1.10E+02 nc 1.10E+02 NA NA NA NA slentene 121-80-7 0.1 0.1 0.10E+02 nc 1.10E+02 NA NA NA slinitrolulene 35572-78-2 NA NA NA NA NA	Nitrobenzene	98-95-3	2.09E+00	nc	2.19E+00	nc	2.09E+00	NA	1.51E+04		L	1.51E+04
99-08-1 3.65E+01 nc 7.30E+01 nc 3.65E+01 NA 3.7E+04 99-99-0 3.65E+01 nc 3.65E+01 nA 3.7E+04 zene 99-99-0 3.65E+01 nc 4.80E-01 nA 3.0E+04 zene 99-65-0 3.65E+01 nc 3.65E+01 nA 3.0E+03 sene 99-65-0 3.65E+00 nc 3.65E+00 nA 3.0E+03 sene 606-20-2 3.65E+00 nc 3.65E+00 nc 3.65E+00 NA 3.0E+02 senzene 99-35-4 1.10E+02 nc 1.10E+02 nc 2.24E-01 nc 2.24E-01 nc 2.24E-01 nc 3.65E+01 nA nA nA sinitrotoluse 192-63-4 n.1 n. 3.65E+01 nc 3.65E+01 nA nA nA nA sinitrotoluse 121-82-4 n.A n.A n.A n.A n.A n.A sinitrotoluse	2-Nitrotoluene	88-72-2	3.65E+01	nc	3.65E+01	nc	3.65E+01	NA	NA			ΑN
serie 99-99-0 3.65E+01 nc 3.65E+01 nc 3.65E+01 NA 3.37E+04 zene 55-63-0 4.80E-01 c 4.47E-01 c 4.80E-01 NA NA zene 99-65-0 3.65E-01 nc 3.65E-01 NA 3.00E+03 ene 606-20-2 3.65E+00 nc 3.65E+00 NA 3.00E+02 uene 121-14-2 7.30E+00 nc 7.30E+00 NA 6.00E+02 uene 121-14-2 7.30E+00 nc 7.30E+00 NA 6.00E+02 uene 121-14-2 7.30E+00 nc 7.30E+00 NA 8.00E+02 uene 121-14-2 7.30E+00 nc 7.30E+00 NA 8.00E+02 slutene 118-96-7 2.24E-01 c 2.09E-01 c 2.24E-01 NA NA slutene 118-96-7 2.24E-01 nA NA NA NA NA slintrotoluene 19406-51	3-Nitrotoluene	99-08-1	3.65E+01	nc	7.30E+01	nc	3.65E+01	NA	ΑN			¥
55-63-0 4.80E-01 c 4.47E-01 c 4.80E-01 NA NA NA 99-65-0 3.65E-01 nc 3.65E-01 NA 3.00E+02 NA 99-65-0 3.65E+00 nc 3.65E+00 NA 6.00E+02 NA 121-14-2 7.30E+00 nc 7.30E+00 NA 6.00E+02 NA 121-14-2 7.30E+00 nc 7.30E+00 NA 6.00E+02 NA 121-14-2 7.30E+00 nc 1.10E+02 nc 1.10E+02 NA 3.00E+04 118-36-7 2.24E-01 nc 2.09E-01 c 2.24E-01 NA NA 121-82-4 6.11E-02 c 5.69E-02 c 8.11E-02 NA NA 13406-51-0 NA NA NA NA NA NA NA 479-45-8 3.65E+01 nc 1.83E+02 nc 1.83E+02 NA NA NA 78-11-5 NA NA <td>4-Nitrotoluene</td> <td>0-66-66</td> <td>3.65E+01</td> <td>nc</td> <td>3.65E+01</td> <td>nc</td> <td>3.65E+01</td> <td>NA</td> <td></td> <td></td> <td>-</td> <td>3.37E+04</td>	4-Nitrotoluene	0-66-66	3.65E+01	nc	3.65E+01	nc	3.65E+01	NA			-	3.37E+04
99-65-0 3.65E-01 nc 3.65E-01 nc 3.65E-01 nc 3.65E-00 nc 3.65E-00 nc 3.65E-00 nc 3.65E+00 nc 3.65E+00 nc 3.65E+00 nc 7.30E+02 nc 7.30E+02 nc 7.30E+02 nc 1.10E+02	Nitroglycerine	55-63-0	4.80E-01	ပ	4.47E-01	ນ	4.80E-01	ΑN	¥			¥
606-20-2 3.65E+00 nc 3.65E+00 nc 3.65E+00 NA 6.00E+02 NA 121-14-2 7.30E+00 nc 7.30E+00 NA 6.00E+02 NA 99-35-4 1.10E+02 nc 1.10E+02 NA 3.00E+04 NA 118-96-7 2.24E-01 c 2.09E-01 c 2.24E-01 NA NA 121-82-4 6.11E-02 c 5.09E-02 c 8.11E-02 NA NA 19406-51-0 NA NA NA NA NA NA 35572-78-2 NA NA NA NA NA NA 479-45-8 3.65E+01 nc 1.83E+02 nc 1.83E+02 NA NA 2691-41-0 1.83E+02 nc 1.83E+02 nc 1.83E+02 NA NA 78-11-5 NA NA NA NA 1.50E+04 NA 117-81-7 4.80E-01 nc 1.83E+02 nA <t< td=""><td>1,3-Dinitrobenzene</td><td>99-65-0</td><td>3.65E-01</td><td>nc</td><td>3.65E-01</td><td>nc</td><td>3.65E-01</td><td>NA</td><td>3.00E+03</td><td></td><td>L</td><td>3.00E+03</td></t<>	1,3-Dinitrobenzene	99-65-0	3.65E-01	nc	3.65E-01	nc	3.65E-01	NA	3.00E+03		L	3.00E+03
121-14-2 7.30E+00 nc 7.30E+00 nc 7.30E+00 nc 7.30E+00 NA 6.00E+02 NA 99-35-4 1.10E+02 nc 1.10E+02 nc 1.10E+02 NA 3.00E+04 nc 118-96-7 2.24E-01 c 2.09E-01 c 2.24E-01 NA NA 121-82-4 6.11E-02 c 5.69E-02 c 8.11E-02 NA NA 19406-51-0 NA NA NA NA NA NA NA 479-45-8 3.65E+01 nc 3.65E+01 nc 1.83E+02 nc 1.83E+02 NA NA 2691-41-0 1.83E+02 nc 1.83E+02 nc 1.83E+02 NA NA NA 84-74-2 3.65E+02 nc 3.65E+02 nc 4.80E+02 NA 1.50E+04 117-81-7 4.80E-01 nc 3.65E+02 nc 4.80E-01 NA 1.50E+04 117-81-7 4.80E-01	2,6-Dinitrotoluene	606-20-2	3.65E+00	nc	3.65E+00	nc	3.65E+00	ΝA	6.00E+02		-	6.00E+02
99-35-4 1.10E+02 nc 1.10E+02 nc 1.10E+02 nc 1.10E+02 nc 1.10E+04 nc 1.10E+04 nc 3.00E+04 nc 1.10E+04 nc 2.24E-01 nc 2.50E+04 nc 1.21-82-4 6.11E-02 nc 6.11E-02 nc 6.11E-02 nc 1.21-82-4 nc 1.21-82-4 nc nc nc 1.11E-02 nc	2,4-Dinitrotoluene	121-14-2	7.30E+00	nc	7.30E+00	nc	7.30E+00	VΝ	6.00E+02	Ϋ́	L	6.00E+02
118-96-7 2.24E-01 c 2.24E-01 nA 2.50E+04 121-82-4 6.11E-02 c 5.69E-02 c 6.11E-02 nA nA 19406-51-0 NA NA NA NA NA NA 35572-78-2 NA NA NA NA NA NA 479-45-8 3.65E+01 nc 3.65E+01 nc 1.83E+02 NA NA 2691-41-0 1.83E+02 nc 1.83E+02 nc 1.83E+02 NA NA 78-11-5 NA NA NA NA NA 1.50E+01 84-74-2 3.65E+02 nc 3.65E+02 nc 4.80E-01 NA 1.50E+04 117-81-7 4.80E-01 c 4.80E-01 nc 4.80E-01 NA 1.00E+04 122-39-4 9.13E+01 nc 9.13E+01 nc 9.13E+01 NA 3.00E+04	1,3,5-Trinitrobenzene	99-35-4	1.10E+02	nc	1.10E+02	nc	1.10E+02	NA	3.00E+04		۲	3.00E+04
121-82-4 6.11E-02 c 6.11E-02 NA 1.50E+04 NA 1.22-39-4 9.13E+01 NA 1.00E+04 NA 1.00E+04 NA 1.22-39-4 9.13E+01 NA 1.00E+04 NA 1.00E+04 NA 1.22-39-4 9.13E+01 NA 1.00E+04 NA 1.00E+04 NA 1.00E+04 NA 1.00E+04 NA 1.00E+04 <td>2,4,6-Trinitrotoluene</td> <td>118-96-7</td> <td>2.24E-01</td> <td>O</td> <td>2.09E-01</td> <td>ပ</td> <td>2.24E-01</td> <td>NA</td> <td></td> <td></td> <td>-</td> <td>2.50E+04</td>	2,4,6-Trinitrotoluene	118-96-7	2.24E-01	O	2.09E-01	ပ	2.24E-01	NA			-	2.50E+04
19406-51-0 NA NA NA NA NA NA NA NA NA 1.50E+04 A A A A A A A A A A B A B A B </td <td>RDX</td> <td>121-82-4</td> <td>6.11E-02</td> <td>O</td> <td>5.69E-02</td> <td>ပ</td> <td>6.11E-02</td> <td>NA</td> <td>NA</td> <td></td> <td></td> <td>¥Ζ</td>	RDX	121-82-4	6.11E-02	O	5.69E-02	ပ	6.11E-02	NA	NA			¥Ζ
no-2,6-Dinitrotoluene 35572-78-2 NA NA NA 1,50E+04 Process 479-45-8 3,65E+01 nc 3,65E+01 nc 1,83E+02 nc 1,83E+02 NA NA NA NA NA NA NA NA 1,70E+01 NA NA NA NA 1,70E+01 NA 1,70E+01 NA 1,70E+01 NA 1,70E+04 NA		19406-51-0	A A		NA		NA	NA	NA			¥
479-45-8 3.65E+01 nc 3.65E+01 nc 3.65E+01 NA NA <th< td=""><td></td><td>35572-78-2</td><td>ΑĀ</td><td></td><td>NA NA</td><td></td><td>NA</td><td>NA</td><td>1.50E+04</td><td></td><td>L</td><td>1.50E+04</td></th<>		35572-78-2	ΑĀ		NA NA		NA	NA	1.50E+04		L	1.50E+04
2691-41-0 1.83E+02 nc 1.83E+02 NA NA NA NA NA NA NA S.00E+01 NA NA NA NA NA NA 1.50E+04 NA NA 1.50E+04 NA NA 1.00E+04 NA 1.00E+04 NA 1.00E+04 NA 1.22-39-4 9.13E+01 nc 9.13E+0	Tetryl	479-45-8	3.65E+01	nc	3.65E+01	nc	3.65E+01	NA	ΑN			¥
78-11-5 NA NA NA NA 5.00E+01 84-74-2 3.65E+02 nc 3.65E+02 NA 1.50E+04 117-81-7 4.80E-01 c 4.47E-01 c 4.80E-01 NA 1.00E+04 122-39-4 9.13E+01 nc 9.13E+01 nc 9.13E+01 NA 3.00E+04	НМХ	2691-41-0	1.83E+02	nc	1.83E+02	nc	1.83E+02	ΥN	¥			¥
84-74-2 3.65E+02 nc 3.65E+02 nc 3.65E+02 NA 1.50E+04 117-81-7 4.80E-01 c 4.47E-01 c 4.80E-01 NA 1.00E+04 122-39-4 9.13E+01 nc 9.13E+01 nc 9.13E+01 NA 3.00E+04	Pentaerythritoltetranitrate	78-11-5	NA		NA		ΝΑ	Ν	5.00E+01		-	5.00E+01
117-81-7 4.80E-01 c 4.47E-01 c 4.80E-01 NA 1.00E+04	Dibutyl Phthalate	84-74-2	3.65E+02	nc	3.65E+02	nc	3.65E+02	NA	1.50E+04			1.50E+04
122-39-4 9.13E+01 nc 9.13E+01 nc 9.13E+01 NA	Dioctyl Phthalate	117-81-7	4.80E-01	ပ	4.47E-01	၁	4.80E-01	NA	1.00E+04		-	1.00E+04
	Diphenylamine	122-39-4	9.13E+01	nc	9.13E+01	nc	9.13E+01	۷N	3.00E+04		L	3.00E+04

PRG: Preliminary Remediation Goals c: cancer nc:non-cancer

Compound to the Acute Evaluation (HBSL) Compound to the Acute Evaluation (ATV) Compound to the Acute Evaluation (ATV)	esponse Planning Guidelines lergency Exposure Limits re Guideline Level
RBC: Risk-Based Concentration HBSL: Health-Based Screening Level	(E) ERPG: Emergency Response Planning Guidelines (T) TEEL: Temporary Emergency Exposure Limits (A) AEGL: Acute Exposure Guideline Level ATV: Acute Toxicity Value NA: Not Available

APPENDIX D RISK ASSESSMENT DATA

Table D-1: Comparison of Air Concentrations With Health-Based Values - 100 meter location

and (0 condes co	Health-Based Screening Level (µg/m³)	วี		000			
uoride uoride uoride iid iomide iid sacid cid yanide fanide n m n n			3	DODIC: A080			
uoride uoride nioride comide sid cid cid yanide yanide n n n n		C _{chronlr} /		Ü	Acute Toxicity	,	
uoride uoride iloride omide sid e sacid ccid e sacid Annide m n n n n n n n		HBSL	× 12	(m/grl)	Value (μg/m³)	ATV	> 12
uoride nioride comide sid cid cid yanide yanide m m n n n n n							
nlortde omide id secid cid vanide fanide fanide n n n n	2		2	VIV.	4 600 . 00		
omide seld cid cid cid yanide yanide m m n n n n	2.08E+01		2 2		1.00E+03		ng n
acid cid cid e e yanide yanide Particulate n n n	NN N		5 6	2 2	4.50E+03		na
e e cid cid cid e e e yanide yanide tes Particulate m m n n n n n n n n n n n n n n n n n			<u> </u>	Y L	9.93E+03		กล
cicld general services for the services	10		BI	6.55E-U1	1.30E+03	6.58E-04	9
yanide yanide fos Particulate Particulate n n n	+		E 2	AN I	3.00E+03		na
yanide /anide			BE	4.84E-01	2.00E+03	2.42E-04	90
Particulate Particulate n n n n	7.30E+01	8 70E.05	2	4 575 04	- 1		
Particulate Particulate N N n n n	-	1 07E-01	2 2	1.0/ =-01	5.00E+03	3.15E-05	2
Particulate m y n n	L	2	2	1.0/ 5101	ı	2.08E-03	2
e v e e	L	4 ROF-02	5	1 025104	4.4		
u u u u	L	4 43E-02	2 2	1.93E+01	AN.		na
	1.50F+01	1 2RE-01	2 2	10,700,101	NA.		a
	L	10-707	2	1.345+01	NA		na
n u u	5.11E+00	1 21E-02	5	1 000			
		1 80F-01	2 2	7 535 100	3.00E+04	6.62E-05	2
u u u	L	1.001	2 2	7.33E+00	1.50E+03	5.02E-03	2
	-	2 45E.01	2	14 F	3.00E+01		E E
E . E		-10F-01	2 2	4.1.5+00	1.50E+03	2.74E-03	2
	1.07E-03		_	¥ S	5.00E+00		ВП
£	L		+	7010	3.00E+01		na
	1			8.70E-01	3.00E+04	2.90E-05	2
	2.20F+02		2 2	<u> </u>	1.50E+03		<u>B</u>
	1.46E+02	8 ORE OA	<u> </u>	14. CO	6.00E+01		g
		2 ORF-04	2 2	3.70E+00		1.26E-03	2
Nagnesium			2 2	NA C		6.68E-UZ	2
Manganese	5.11E-02		2 2	4	3.005+04		Ва
	7.30E+01		2	\ V	3.00E+03		2
u	1.83E+01		2 2	AM	3.00E+03		ВП
Silver	1.83E+01		2 2	NA N	3 005 - 02		2
	2.56E-01		2 2	ΔN	3.005+02		e l
Ε	2.56E+01		2 2	<u> </u>	3.00E+02		g
Zinc 3.89E-02	1.10F+03	2 ERE OR	<u> </u>	NA 1			na
TQ:11 Carbonyls		0.00E-03	1	1.435+00	3.00E+04	4.17E-05	00
Formaldehyde 7.92E-03	1.48F-01	5 38E 00	1	101			
	8 73F-01	7.30F-02	2 2	1.49E-01		1.21E-04	2
			<u>a</u>	4	1.80E+04		na

D-2

	-	Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080	.56-mm E	ım Blank, M2 DODIC: A080	, M200 (M \080	116A1 Rifle)		
Compound	С _{chronle} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronic} / HBSL	> 12	Cacute	Acute Toxicity Value (µg/m³)	Cacuto/ ATV	> 12
Acetone	NA	3.65E+02		па	٩N	2.37E+06		na
Acroleln	NA	2.09E-02		В	٩N	2.30E+02		na
Proprionaldehyde	NA	NV		па	ΑΝ	7.50E+04		na
Crotonaldehyde	NA	3.54E-03		na	AN	5.72E+03		E
Butyraldehyde	NA	NV		па	AN	7.38E+04		na
Benzaldehyde	NA	3.65E+02		па	AN	1.50E+04		na
Isovaleraldehyde	NA	AN.		ВE	ΑN	AN		g
Valeraldehyde	AN	Ž		В	ΑN	NA		ē
o,m,p-Tolualdehyde	ΑN	N		na	ΑN	NA NA		E
Hexaldehyde	NA	≥		Вa	ΑN	NA		E
2,5-Dimethylbenzaldehyde	NA	N		na	¥	NA		2
Hydrocarbons								
Methane	5.24E-01	N		na	1.69E+01		5.11E-06	2
Ethylene	2.12E-01	N		na	6.81E+00		1.48E-05	1
Acetylene	1.33E-01	NV		na	1.07E+00			1
Ethane	2.36E-02	NV		na	1.90E-01	ΑN		g
Propylene	5.03E-02	NV		na	4.05E-01	NA		na
Propane	NA	NV		na	NA	3.78E+06		a
Propyne (methyl acetylene)	8.38E-03	NV		na	2.70E-01	2.79E+06	9.67E-08	2
Isobutane	NA	NV		na	ΝΑ	9.52E+05		na
1-Butene/Isobutylene (115-11-7)	1.41E-02	NV		na	4.53E-01	6.87E+06	6.59E-08	2
1,3-Butadiene/butane	ΝΑ	3.74E-03		กล	NA	2.20E+04		па
cls-butene	NA	2		na	ΑN	1.72E+04		Вã
1-Butyne	ΨZ.	NS.		na	ΝΑ	ΑΝ		na
trans-Butene	AN.	2		na	ΑN	1.72E+04		na
2-Butyne (crotonylene)	AN.	2		na	¥N	ΝΑ		na
n-Pentane	NA	N.		па	ΝΑ	1.80E+06		na
п-Нехапе	7.68E-03	2.10E+02	3.66E-05	2	2.47E-01	5.28E+05	4.68E-07	2
Dioxins/Furans								
2378-Tetrachiorodibenzo-p-dioxin	۷A	4.48E-08		na	NA	3.50E+00		na
12378-Pentachlorodlbenzo-p-dloxin	ΝΑ	N		na	٧N	2.50E+00		na
123478-Hexachlorodibenzo-p-dioxin	NA	NΛ		na	ΨN	AN		na
123678-Hexachlorodlbenzo-p-dioxin	NA	NV		na	ΑN	1.50E+01		g
123789-Hexachlorodibenzo-p-dioxin	NA	1.48E-06		na	ΑN	ΑN		ē
1234678-Heptachlorodibenzo-p-dioxin	ΝΑ	NV		na	ΑN	ĄN		E
OCDD	6.81E-10	≥		na	2.19E-08	1.50E+02	1.46E-10	92
2378-Tetrachlorodibenzo-p-furan	۷A	N		na	NA	2.00E+00		na
12378-Pentachtorodibenzo-p-furan	ΑN	N		na	ΑN	ΝΑ		na
23478-Pentachlorodibenzo-o-furan	NA	2		na	NA	7.50E-02		na

		Cartridge,	5.56-mm DO	nm Blank, M2 DODIC: A080	c, M200 (N	Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080		
Compound	Cehronic	Health-Based	ر ن		c	# - *		
	(µg/m³)	(µ/g/m ₃)	HBSL	<u> </u>	(hg/m³)	Value (µg/m³)	Cacuta/ ATV	> 1?
123478-Hexachlorodibenzo-p-furan	ΔN							
123678-Hexachlorodibenzo-p-furan	C 42	AN.		g	ΑN	7.50E+00		62
123789-Hexachlorodibenzo-p-furan	V V	2		a	NA	2.50E+00		2 2
234678-Hexachlorodibenzo-p-furan	Y N	2		a	ΝA	AA		2 2
1234678-Heptachlorodibenzo-p-furan	NA	2		밀	NA	1.50E+00		2
1234789-Heptachlorodibenzo-p-furan	ΔN	AN.		ē	NA	ΑN		2
OCDF	S N	2		B	ΑN	Ą		2 2
Permanent Gases		AN		g	NA	3.00E+02		2
Ammonia (NH3)	AN	4 045 100						T
Carbon Dioxide (CO2)	7 17F+01	NIN NIN		g	Ϋ́	1.75E+04		8
Carbon Monoxide (CO)	8 89E+01	1 005	1000	- 1	2.31E+03	5.40E+07	4.27E-05	2
Oxides of Nitrogen (as NO)	4 13E+00	1.00E+04	8.89E-03	ı	7.15E+02	2.30E+05	3.11E-03	2
Sulfur Dioxide (SO2)	4 09E-02	1.00E+02	4.13E-02	- 1	1.33E+02	3.08E+04	4.32E-03	2
VOC®	70.700	0.00E+01	5.12E-04	2	3.29E-01	7.89E+02	4.17E-04	2
Propene	3.34F-02	MIX						
Dichlorodifluoromethane	1 55E OF	7100		a	2.69E-01	¥		2
Chlorodifluoromethane	1.33E-03	Z.U9E+0Z	7.42E-08	٤	4.98E-04	20	3.36F-11	2 2
Frann 114	\$.	5.11E+04		na	Ϋ́	4.41E+08		2 2
Chloromothono	NA 101 0	N		na	ΑΝ	2 10F±07		ē ļ
Visit OFFER	2.43E-05	1.07E+00	2.27E-05	2	1.82F-03	T	1700	<u> </u>
1 3 Butadon	NA	2.20E-02		E	N A	1	8.85E-09	2
enanal-c,1	3.56E-04	3.74E-03	9.54E-02	2	6 68F-03	7	1,00	g
Diomomenane	NA	5.21E+00		6	NA	1	3.04E-07	2
Chloroethane	ΑA	2.32E+00		2	42	3.02E+04		na
Ulchiorofluoromethane	WA	2.09E+02		2 2	\$ \$	2.04E+U6		na
lichlorofluoromethane	2.93E-05	7.30E+02	4 01F-08	1 2	0 445 04	T		Па
Pentane	AN	2		2 2	9.416-04	7	3.36E-10	no
Acrolein	3.62E-02	2.09E-02	1 74F±00	9	Z 17 20 C			กล
1,1-Dichloroethene	Ϋ́	5.21E+02	2		4.916-01	2.30E+02	1.27E-03	o O
Freon 113	AN AN	3.13E+04	1		¥.	7.92E+04		na na
Acetone	¥	3 65E+02		<u> </u>	¥.	9.58E+06		Бa
Methyl lodide	¥	NV NV		g E	Y V	2.37E+06		ē
Carbon Disulfide	5.00E-03	co	20 110 0	2	A A	1.45E+05		na
Acetonitrile	4 71F-02		6.84E-06	-	1.61E-01	Г	5.17E-06	2
3-Chloropropene	NA	T	/.60E-04	-	1.52E+00	Γ	1.50E-05	2
Methylene Chloride	9.64F-03	A 005-1-00	100	-	ΑN			l e
fert-Butyl Alcohol	NΑ	4.095.400	4.36E-03	┪	1.81E-01		2.60E-07	2
Acrylonitrile	4.94E-03	2 835 00	10 111	+	¥Ν		T	2 2
frans-1,2-Dichloroethene	AN AN	7 30E±04	1.732-01	+	9.28E-02	2.17E+04 4	4.27E-06	2
Methyl t-Butyl Ether	AN	3 125-101		<u>e</u>	NA			E
		J. 13ETU3		E E	NA	4.32E+05		2 2

D-4

		Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080	.56-mm E	ım Blank, M2 DODIC: A080	, M200 (N	16A1 Rifle)		
Compound	С _{chronic} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronic} / HBSL	× 1×	С _{асите} (µg/m³)	Acute Toxicity Value (µg/m³)	G _{noute} /	> 12
Hexane	3.83E-02	2.09E+02	1.84E-04	2	1.23E+00	5.28E+05	2.33E-06	2
1,1-Dichloroethene	ΝA	5.21E+02		na	¥	7.92E+04		na
Vinyl Acetate	NA	2.09E+02		па	ΝA	1.92E+04		na
cls-1,2-Dichloroethene	NA	3.65E+01		na	ΑĀ	7.92E+05		na
2-Butanone	2.86E-04	1.04E+03	2.74E-07	은	9.19E-03	8.85E+05	1.04E-08	2
Ethyl Acetate	2.22E-03	3.29E+03	6.76E-07	2	7.14E-02	1.44E+06	4.96E-08	2
Methyl Acrylate	۷A	1.10E+02		na	¥	AN		na
Chloroform	ΑN	8.35E-02		БE	ΑĀ	9.76E+03		Ē
1,1,1-Trichloroethane	Ą	1.04E+03		E	¥	1.94E+06		l ec
Carbon Tetrachloride	ΝA	1.28E-01		na	Α̈́	1.28E+05		ē
1,2-Dichtoroethane	9.18E-04	7.39E-02	1.24E-02	2	6.89E-02	8.08E+03	8.53E-06	2
Вепzепе	4.71E-02	2.49E-01	1.89E-01	20	8.84E-01	1.56E+05	5.67E-06	2
Isooctane (2,2,4-tr/methy/pentane)	NA	۸N		na	NA	3.50E+05		ВE
Heptane	NA	NV		na	ΑN	1.80E+06		na
Trichloroethane	NA	1.04E+03		na	NA	1.94E+06		Ē
Ethyl Acrylate	NA	1.40E-01		na	NA	6.14E+04		na
1,2-Dichloropropane	ΝΑ	9.89E-02		na	NA	5.08E+05		na
Methyl Methacrylate	۸A	7.30E+02		na	NA	4.09E+05		na
Dibromomethane	¥Ν	3.65E+01		па	NA	2.50E+05		na
1,4-Dloxane	ΑN	6.11E-01		na	NA	9.00E+04		g
Bromodichloromethane	NA	1.08E-01		na	NA	4.00E+03		E
4-Methyl-2-Pentanone	6.40E-04	8.34E+01	7.67E-06	ou Ou	2.06E-02	3.07E+05	6.71E-08	2
Toluene	1.63E-02	4.02E+02	4.05E-05	2	1.31E-01	1.88E+05	6.98E-07	2
Octane	ΑΝ	> N		na	¥	NA		na
trans-1,3-Dichloropropene	¥N.	5.17E-02		g	₹	۷Ą		na
Ethyl Methacrylate	¥N.	3.29E+02		na	¥	NA		na
1,1,2-Trichloroethane	AN .	1.20E-01		Ba	¥	1.64E+05		na
Tetrachloroethene	ΑN	3.31E+00		E I	Ϋ́Α	6.78E+05		na
2-Hexanone	NA A	5.11E+00		g	ΑN	4.09E+04		na
Dibromochloromethane	AA A	8.00E-02		na	ΝA	6.00E+03		na
1,2-Dibromoethane	ΑN	8.73E-03		na	NA	1.54E+05		na
Chlorobenzene	NA	6.21E+01		na	ΝA	1.38E+05		na
1,1,1,2-Tetrachloroethane	ΑN	2.60E-01		na	NA	5.15E+04		na
Ethylbenzene	3.41E-04	1.06E+03	3.22E-07	90	1.10E-02		2.02E-08	2
m&p-Xylene	9.41E-04	7.30E+02	1.29E-06	01	3.03E-02		4.65E-08	1
o-Xylene	1.75E-04	7.30E+02	2.40E-07	9	5.63E-03		8.65E-09	ou
Styrene	1.50E-03	1.06E+03	1.42E-06	2	1.21E-02		5.67E-08	2
Bromoform	NA	1.75E+00		na	NA	6.20E+03		na
Cumene	NA	4.02E+02		na	NA	2.46E+05		na

		Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080	.56-mm E	ım Blank, M2 DODIC: A080	, M200 (N 1080	116A1 Riffe)		
Compound	С _{сһголіс} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronic} / HBSL	> 12	Cacute (µg/m³)	Acute Toxicity Value (μg/m³)	Cacute/ ATV	> 1?
1,1,2,2-Tetrachloroethane	ΑN	3.31E-02		na	Ā	2.06E+04		na
1,2,3-Trichloropropane	۸A	9.61E-04		g	ΑN	6.03E+04		e
Bromobenzene	NA	1.04E+01		na	Ϋ́	4.82E+04		a
4-Ethyltoluene	1.69E-04	N		па	5.44E-03	1.25E+05	4.35E-08	1
1,3,5-Trimethylbenzene	7.37E-05	6.21E+00	1.19E-05	2	2.37E-03	3.68E+05	6.44E-09	1
Alpha Methyl Styrene	NA	2.56E+02		па	ΨZ	NA		1
1,2,4-Trimethylbenzene	9.90E-05	6.21E+00	1.60E-05	2	3.19E-03	1.80E+05	1.77E-08	<u> </u>
1,3-Dichlorobenzene	NA	3.29E+00		na	¥	3.61E+04		┸
1,4-Dichlorobenzene	NA	3.06E-01		па	¥	6.61E+05		E
Benzyl Chloride	ΝA	3.96E-02		na	ΑĀ	5.20E+03		E
1,2-Dichlorobenzene	NA	2.09E+02		na	¥Ν	3.01E+05		a
Hexachlorethane	NA	4.80E-01		В	ΑN	2.90E+04		Pa
1,2,4-Trichlorobenzene	NA	2.08E+02		па	ΨN	3.71E+04		2
Hexachlorobutadlene	NA	8.73E-02		ā	₹	3.21E+04		e
SVOCe								
n-nitrosodimethylamine	NA	1.37E-04		па	¥	2.50E+03		E
bls(2-chloroethyl)ether	NA	5.82E-03		na	ΑN	5.85E+04		E
phenoi	1.79E-03	2.19E+03	8.18E-07	2	5.76E-02	3.85E+04	1.50E-06	<u> </u>
2-chlorophenol	ΝΑ	1.83E+01		na	ΑĀ	5.25E+03		1
1,3-Dichlorobenzene	NA NA	3.29E+00		Б	Ϋ́	3.61E+04		g
1,4-dichlorobenzene	ΑN	3.06E-01		na	ΑN	6.61E+05		E
1,2-dichlorobenzene	AN	2.09E+02		na	NA	3.01E+05		na
benzyl alcohol	ΑN	1.10E+03		na	NA	5.53E+04		na
bls(2-chlorolsopropyl)ether	AA	1.92E-01		na	NA	6.99E+04		na
Z-methylphenol	Ψ.	1.83E+02		na	Ϋ́	NA		na
nexachloroethane	Y.	4.80E-01		g	Ψ¥	2.90E+04		na
n-nitroso-di-n-propylamine	NA.	9.61E-04		na	Ϋ́Α	2.00E+02		па
4-methylphenol	ΝΑ	1.83E+02		na	Ϋ́	NA		na
nltrobenzene	ΑN	2.09E+00		na	NA	1.51E+04		na
Isophorone	ΨN	7.08E+00		na	NA	2.83E+04		na
2-nitrophenol	ΝΑ	≥		na	NA	۷N		na
2,4-dimethylphenol	ΑΝ	7.30E+01		na	NA	ΥN		na
bis(2-chloroethoxy)methane	ΨN	₽		na	NA	۷N		na
2,4-dichlorophenol	AA	1.10E+01		na	NA	3.00E+04		na
1,2,4-trichlorobenzene	ΨN	2.08E+02		na	NA	3.71E+04		na
naphthalene	9.22E-06	3.13E+00	2.95E-06	ဥ	2.97E-04	7.86E+04	3.77E-09	_
4-chloroaniline	ΑΝ	1.46E+01		na	NA	3.00E+04		na
hexachlorobutadiene	AN	8.62E-02		na	Ν	3.21E+04	L	na

		Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080	.56-mm DOI	ım Blank, M2 DODIC: A080	, M200 (N	116A1 Riffe)		
Compound	C _{chronic} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chrontc} / HBSL	> 12	Cacute (µg/m³)	Acute Toxicity Value (µg/m³)	C _{acute} / ATV	> 12
4-chloro-3-methylphenol	NA	N		na	¥	2.00E+04		na
2-methylnaphthalene	ΝΑ	7.30E+01		na	ΑN	2.00E+04		g
hexachlorocyclopentadlene	ΝA	7.30E-02		na	ΑM	2.23E+02		na
2,4,6-trichlorophenol	NA	1.10E+02		na	¥	3.00E+04		Da Da
2,4,5-trichlorophenol	ΑN	3.65E+02		na	¥	3.00E+04		e
2-chloronaphthalene	NA	2.92E+02		na	NA NA	6.00E+02		E
2-nitroaniline	ΝA	2.09E-01		na	MA	NA		l e
Acenaphthylene	ΑN	N N		na	¥	2.00E+02		E
dimethylphthalate	NA	3.65E+04		na	¥	1.50E+04		Ba
2,6-dinitrotoluene	NA	3.65E+00		na	¥	6.00E+02		E
acenaphthene	NA	2.19E+02		na	ΑĀ	1.25E+03		na
3-nitroaniline	NA	N.		na	ΑA	AN		e
2,4-dinitrophenol	ΑN	7.30E+00		na	AA	7.50E+03		na
dibenzofuran	NA A	1.46E+01		па	NA	NA		na
2,4-dinitrotoluene	NA	7.30E+00		na	NA	6.00E+02		g
4-nitrophenol	A A	2.92E+01		na	NA	3.00E+04		na
Fluorene	NA	1.46E+02		na	ΑĀ	7.50E+04		БП
4-chlorophenyl-phenylether	NA	۸N		na	ΑĀ	AN		na
diethylphthalate	NA	2.92E+03		na	Ϋ́	1.50E+04		na
4-nitroanlline	NA	۸N		na	ΑĀ	9.00E+03		na
4,6-dinitro-2-methylphenol	NA	3.65E-01		na	ΝA	5.00E+02		na
n-nltrosodiphenylamine(1)	AN	1.37E+00		па	ΝA	AN		na
4-bromophenyl-phenylether	AA V	N<		na	NA	NA		na
hexachlorobenzene	NA	4.18E-03		Б	ΝA	7.50E+01		па
pentachlorophenol	NA NA	5.60E-02		па	ΑN	1.50E+03		na
phenanthrene	NA NA	2		na	٩	2.00E+03		na
anthracene	ΑV	1.10E+03		па	٧	6.00E+03		na
di-n-butyiphthalate	V.	3.65E+02		Ba	٧	1.50E+04		па
fluoranthene	AA N	1.46E+02		E	Ϋ́	3.00E+01		na
pyrene	NA	1.10E+02		na	NA	1.50E+04		eu
butylbenzylphthalate	ΔN	7.30E+02		na	NA	5.00E+05		na
benzo(a)anthracene	NA	2.17E-02		na	ΑN	6.00E+02		na
сһгуѕепе	ΝΑ	2,17E+00		na	ΑN	2.00E+02		Ba
3,3-dichlorobenzidine	NA	1.50E-02		na	Ϋ́	6.21E+03		na
bis(2-ethylhexyl)phthalate	2.16E-04	4.80E-01	4.50E-04	S.	1.62E-02	1.00E+04	1.62E-06	2
dl-n-octylphthalate	NA	7.30E+01		na	۸A	1.50E+05		na
benzo(b)fluoranthene	ΑΝ	2.17E-02		na	NA	NA		na
benzo(k)fluoranthene	AA	2.17E-01		па	NA	NA		na
benzo(a)ругеле	NA	2.17E-03		na	ΝA	7.50E+03		na

		Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080	.56-mm DOC	nn Blank, M2 DODIC: A080	, M200 (M	16A1 Rifle)		
Compound	C _{chronic} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronlc} / HBSL	× 12	Cacute (µg/m³)	Acute Toxicity Value (μg/m³)	Gacute/ ATV	> 12
Indeno(1,2,3-cd)pyrene	ΑN	2.17E-02		БĒ	¥	AN		2
dlbenz(a,h)anthracene	NA	2.17E-03		E	¥	3.00E+04		2 2
benzo(g,h,i)perylene	AN	N		g	NA NA	3.00E+04		2 2
TO-13 (PAHs)								
naphthalene	2.51E-03	3.13E+00	8.02E-04	2	8.07E-02	7.86E+04	1 03E-06	┩
acenaphthylene	2.02E-04	N		ВП	6.51E-03	2.00E+02	3 26F-05	2 2
Acenaphthene	1.34E-05	2.19E+02	6.12E-08	2	4.31E-04	1.25F+03	3.45E-07	- 1
fluorene	3.91E-05	1.46E+02	2.68E-07	2	1 26E-03	7.50F+04	1 68E-08	ı
phenanthrene	3.85E-05	N		Ē	1.24E-03	2.00E+03	6 20E-07	
anthracene	4.14E-08	1.10E+03	3.78E-11	2	1.33E-06	6 00E+03	2 22E-10	丄
fluoranthene	4.05E-05	1.46E+02	2.77E-07	2	1.30E-03	3.00E+01	4 34F-05	1
pyrene	6.54E-05	1.10E+02	5.98E-07	2	2.11E-03	1.50E+04	1 40E-07	
benzo(a)anthracene	2.67E-05	2.17E-02	1.23E-03	2	2.00E-03	6.00E+02	3.34E-06	1
chrysene	2.34E-05	2.17E+00	1.08E-05	2	1.75E-03	2.00E+02	8.77E-06	_
benzo(b)fluoranthene	3.14E-05	2.17E-02	1.45E-03	2	5.89E-04	AN		
benzo(k)fluoranthene	2.07E-05	2.17E-01	9.54E-05	2	3.88E-04	AN A		g
Benzo(e)pyrene	7.63E-05	NV		na	6.14E-04	AN A		2
benzo(a)pyrene	2.87E-05	2.17E-03	1.32E-02	2	2.15E-03	7.50E+03	2.87E-07	1
Indeno(1,2,3-cd)pyrene	4.87E-05	2.17E-02	2.25E-03	2	9.14E-04	AN		
dlbenz(a,h)anthracene	6.07E-06	2.17E-03	2.80E-03	2	4.56E-04	3.00E+04	1.52E-08	
benzo(g,h,i)perylene	1.34E-04	NV		na	4.31E-03	3.00E+04	1.44E-07	2
Energetics								
Nitrobenzene	ΑΝ	2.09E+00		В	¥	1.51E+04		2
2-Nitrotoluene	Ϋ́	3.65E+01		Бā	۸	AN		2
3-Nitrotoluene	AN	3.65E+01		па	¥	NA		g
4-Nitrotoluene	ΑN	3.65E+01		na	AN	3.37E+04		g
Nitroglycerine	ΨN	4.80E-01		na	ΑN	ΑN		na
1,3-Dinitrobenzene	ΨV	3.65E-01		na	ΑN	3.00E+03		na
Z,6-Uinitrotoluene	AN.	3.65E+00		na	ΑN	6.00E+02		na
Z,4-UINITrotoluene	¥	7.30E+00		na	NA	6.00E+02		g
1,3,5-Trinitrobenzene	¥	1.10E+02		na	ΑN	3.00E+04		E
2,4,8-Trinitrotoluene	ΨN	2.24E-01		БП	ΑN	2.50E+04		g
KDX	ΑN	6.11E-02		na	AN	ΑN		2
4-Amino-2,6-Dinitrotoluene	ΝΑ	NV		na	ΑN	AN		2
2-Amino-2,6-Dinitrotoluene	NA	N		na	ΑN	1.50E+04		2
Tetryi	Ϋ́	3.65E+01		В	¥	NA		2 2
HMX	Ϋ́	1.83E+02		ā	ΑN	NA NA		2 2
Pentaerythritoltetranitrate	AN	N		na	ΑN	5.00E+01		g

> 12

Cacute/ ATV

Acute Toxicity Value (µg/m³)

Cacute (µg/m³)

>12

C_{chronlc}/ HBSL

Health-Based Screening Level

> C_{ehronic} (µg/m³)

> > Compound

(mg/m³)

Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle)

DODIC: A080

1.50E+04 1.00E+04 3.00E+04

¥ ¥ ¥

а Б в в

3.65E+02 4.80E-01

Dibutyl Phthalate Dioctyl Phthalate Diphenylamine

9.13E+01

na: Not avaliable because health-based sceening value Is not available or not applicable if compound was not detected.

NA: Not applicable because compound was not detected.

Footnotes:

Conone: Chronic time-averaged concentration HBSL: Chronic health-based screening level Cecuts: Acute time-averaged concentration

NV: No value available.

ATV: Acute toxicity value

	o
į	\Box

_	2
;	×
څ	ξ
3	_
200	2
ξ	Š
S	2

Table D-2: Comparison of Air Concentrations With Health-Based Values: Total Petroleum Hydrocarbons

100 meter location

Acid Gases		Cartr	idge, 5.56-mm Bla DODIC	Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080	Rifle)
Aliphatic:C<=8	Compound (a)	C _{chronic} (µg/m³)	С _{сhronte} (µg/m³)	С _{сhronlс} (µg/m³)	С _{сһгопіс} (µg/m³)
5.03E-02 NA NA NA 8.38E-03 NA NA NA 1.41E-02 NA NA NA 7.68E-03 NA NA NA 7.68E-03 NA NA NA 7.68E-03 NA NA NA NA NA NA NA </th <th></th> <th>Aliphatic:C<=8</th> <th>Allphatic:C>8</th> <th>Aromatic:C<=8</th> <th>Aromatic:C>8</th>		Aliphatic:C<=8	Allphatic:C>8	Aromatic:C<=8	Aromatic:C>8
5.03E-02 NA NA NA 8.38E-03 NA NA NA 7.68E-03 NA NA NA 7.68E-03 NA NA NA 7.68E-03 NA NA NA 8.38E-02 NA NA NA 8.38E-03 NA NA NA NA NA NA NA NA NA 1.05E-01 NA NA NA NA NA	Acid Gases				
8.38E-03 NA NA 1.41E-02 NA NA 7.68E-03 NA NA 7.68E-03 NA NA 7.68E-03 NA NA NA NA NA NA NA 1.06-01 NA NA 1.06-04 NA NA NA NA NA NA <td>Propylene</td> <td>5.03E-02</td> <td>NA</td> <td>AN</td> <td>NA</td>	Propylene	5.03E-02	NA	AN	NA
1.41E-02	Propyne (methyl acetylene)	8.38E-03	NA	AN	NA
7.68E-03 NA NA NA NA NA 1.10E-01 NA NA NA 1.63E-02 NA NA NA 1.63E-02 NA NA NA 1.63E-02 NA NA NA 1.75E-04 NA NA NA NA NA </td <td>1-Butene/Isobutylene (115-11-7)</td> <td>1.41E-02</td> <td>NA</td> <td>NA</td> <td>NA</td>	1-Butene/Isobutylene (115-11-7)	1.41E-02	NA	NA	NA
3.83E-02 NA	n-Hexane	7.68E-03	AN	NA	NA
NA NA 1.0E-01	Hexane	3.83E-02	NA	NA	NA
NA NA 1.63E-02 NA NA 3.41E-04 NA NA 3.41E-04 NA NA 1.75E-04 NA NA NA NA NA </td <td>Benzene</td> <td>NA</td> <td>NA</td> <td>1.10E-01</td> <td>NA</td>	Benzene	NA	NA	1.10E-01	NA
NA NA 3.41E-04 NA NA 9.41E-04 NA NA 1.75E-04 NA NA NA NA NA	Toluene	NA	NA	1.63E-02	NA
NA NA 9.41E-04 NA	Ethylbenzene	NA	NA	3.41E-04	NA
NA NA 1.75E-04 NA NA NA QLEVE 1.92E+04 1.04E+03 4.17E+02	m&p-Xylene	NA	NA	9.41E-04	NA
NA	o-Xylene	NA	NA	1.75E-04	NA
NA	Styrene	NA	AN	NA	1.50E-03
NA	4-Ethyltoluene	NA	AN	NA	1.69E-04
NA	1,3,5-Trimethylbenzene	NA	NA	NA	7.37E-05
NA	1,2,4-Trimethylbenzene	NA	AN	NA	9.90E-05
NA	naphthalene	NA	AN	NA	9.22E-06
NA	naphthalene	NA	NA	NA	2.51E-03
NA	acenaphthylene	NA	NA	NA	2.02E-04
NA	Acenaphthene	NA	NA	NA	1.34E-05
NA NA NA NA NA NA Level 1.92E+04 1.04E+03 4.17E+02	fluorene	NA	NA	NA A	3.91E-05
NA 1.92E+01 0.00E+00 1.28E-01 4.17E+02	phenanthrene	NA	NA	NA AN	3.85E-05
(µg/m³) 1.19E-01 0.00E+00 1.28E-01 g Level 1.92E+04 1.04E+03 4.17E+02	anthracene	NA	AN	ΑN	4.14E-08
(µg/m³) 1.19E-01 0.00E+00 1.28E-01 g Level 1.92E+04 1.04E+03 4.17E+02	fluoranthene	NA	NA	NA	4.05E-05
g Level 1.92E+04 1.04E+03 4.17E+02	Total (µg/m³)	1.19E-01	0.00E+00	1.28E-01	4.70E-03
	Derived Health-Based Screening Level	1.92E+04	1.04E+03	4.17E+02	2.09E+02

Table D-2: Comparison of Air Concentrations With Health-Based Values: Total Petroleum Hydrocarbons

			100 meter location	uc
	Cartri	idge, 5.56-mm Bla DODIC	Cartridge, 5.56-mm Blank, M200 (M16A1 Rifle) DODIC: A080	Rifle)
Compound (a)	С _{сhronic} (µg/m³)	C _{ehronic} (µg/m³)	C _{chronic} (µg/m³)	C _{chronic} (µg/m³)
	Allphatic:C<=8	Allphatic:C>8	Aromatic:C<=8	Aromatic:C>8
C _{chronlc} /HBSL	6.19E-06	0.00E+00	3.06E-04	2.25F-05
>12	on O	no	01	20 70 70
Footnotes:				
>1? = Is the ratio greater than one?				
NA = Not Applicable because compound was not detected				
C _{chronle} = chronic averaged air Concentration				
HBSL = Health-Based Screening Level				

Table D-3: Comparison of Air Concentrations With Health-Based Values - 200 meter location

		Cartridge, 5.56-mm Blank, M200 (M16A2 Rifle) DODIC: A080	.56-mm 5.56-mm	nm Blänk, M2 DODIC: A080	., M200 (M	16A2 Rifle)		
Compound	C _{chronic} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronic} / HBSL	> 12	Cacute (µg/m³)	Acute Toxicity Value (µg/m³)	Gacute/ ATV	× 12
Acid Gases								
Hydrogen fluoride	ΑN	N		E	AM	1 BOE+03		1
Hydrogen chloride	ΑN	2.08E+01		2	ΑN	4 50E+03		2 2
Hydrogen bromide	ΑN	N		2	AN	9 92E+03		
Nitric Acid	4.07E-02	N		2	3.28E-01	1 30E+03	2 525.04	2 2
Phosphoric acid	ΑN	1.04E+01		2	AN	3 OOE+03	Z.3ZE-04	2 2
Sulfuric Acid	2.31E-02	₽		2	1.86E-01	2 00E+03	0 285.05	
Cyanide						20. 100.	9.40L-03	
Particulate Cyanide	1.87E-03	7.30E+01	2.57E-05	2	6 03E-02	5 00E+03	1 21E OF	_L
Hydrogen Cyanide	1.28E-01	3.13E+00	4.09E-02	1_	4.12E+00	5 17E+03	7 065 04	2
				1_			1.30F-01	
Total Suspended Particulate	9.19E-01	5.00E+01	1.84E-02	2	7.39E+00	AN		2
PM10	8.49E-01	5.00E+01	1.70E-02	2	6.83E+00	NA		
PM2.5	7.33E-01	1.50E+01	4.89E-02	2	5,90E+00	AN		2
Metals								5
Aluminum	2.36E-02	5.11E+00	4.63E-03	2	7.60E-01	3.00E+04	2 53F-05	5
Antlmony	8.96E-02	1.46E+00	6.14E-02	<u> </u>	2.88E+00	1.50E+03	1 97E-03	- [
Arsenic	NA	4.47E-04		ā	¥	3.00E+01		1
Barlum	4.89E-02	5.21E-01	9.38E-02	2	1.57E+00	1.50E+03	1.05E-03	2
Beryllum	٩V	8.00E-04		па	ΑZ	5.00E+00		2
Cadmium	Ϋ́	1.07E-03		na	¥	3.00E+01		2
Calclum	1.04E-02	NV		na	3.33E-01	3.00E+04	1.11E-05	_
Chromlum	¥	1.53E-04		na	Ϋ́	1.50E+03		1
Cobalt	Y.	2.20E+02		na	Ν	6.00E+01		В
republic to the second	4.51E-02	1.46E+02	3.09E-04	2	1.45E+00	3.00E+03	4.83E-04	2
Magneshim	1. 19E-01	1.50=+00	7.95E-02	2	3.84E+00	1.50E+02	2.56E-02	2
Mandanese	Ç	NV R 11E 00		2	¥:	3.00E+04		па
Nickal	5 5	7 205 104		<u>na</u>	¥.	3.00E+03		В
Colonium	<u> </u>	7.30E+01		g	Ϋ́	3.00E+03		na
Seighnin	¥	1.83E+01		В	Ϋ́	6.00E+02		na
Silver	Y.	1.83E+01		na	NA	3.00E+02		g
E Dalling 1	Y.	2.56E-01		na	Ϋ́	3.00E+02		E
Vanadlum	ΨN	2.56E+01		na	ΑN	1.50E+02		a
Zinc	1.49E-02	1.10E+03	1.36E-05	ou	4.80E-01	3.00E+04	1.60E-05	1_
TO-11 Carbonyls								Ь.
Formaldehyde	3.04E-03	1.48E-01	2.05E-02	uo	5.70E-02	1.23E+03	4.63E-05	2
Acetaldehyde	Y V	8.73E-01		na	₹	1 ROF+04		1_

		Cartridge, 5:56-mm Blank, M200 (M16A2 Rifle)	56-mm	3lank,	M200 (M	16A2 Rifle)		
			J D	DODIC: A080	080	* * *		
Compound	C _{chrente} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronle} / HBSL	> 1?	C _{ecute} (µg/m³)	Acute Toxicity Value (µg/m³)	Cacute/ ATV	> 12
Acetone	ΑN	3.65E+02		na	¥	2.37E+06		Ē
Acrolein	¥	2.09E-02		na	¥	2.30E+02		g
Proprionaldehyde	Ϋ́Α	Ž		na	¥	7.50E+04		g
Crotonaldehyde	ΑN	3.54E-03		na	ΑN	5.72E+03		ā
Butyraldehyde	ΑN	N N		na	¥	7.38E+04		E
Benzaldehyde	Ϋ́	3.65E+02		na	¥Ν	1.50E+04		E
Isovaleraldehyde	Ϋ́	N N		na	¥	AN		æ
Valeraldehyde	ΑN	≥		na	¥	¥		E
o,m,p-Tolualdehyde	NA NA	N		ВU	A A	¥		E
Hexaldehyde	Ϋ́	N		ВU	¥	¥		a
2,5-Dimethylbenzaldehyde	NA	N		na	NA	ΑN		na
Hydrocarbons								il
Methane	2.01E-01	NV		na	6.46E+00		1.96E-06	1 1
Ethylene	8.11E-02	N.		ทล	2.61E+00	4.60E+05	5.67E-06	2
Acelylene	5.09E-02	N		ทล	4.09E-01	NA		E .
Ethane	9.03E-03	NV		na	7.26E-02	AN		g
Propylene	1.93E-02	2		na	1.55E-01	ΑN		BE
Propane	NA	NV		na	VΝ	3.78E+06		BE
Propyne (methyl acetylene)	3.21E-03	N/		na	1.03E-01	2.79E+06	3.70E-08	٤
Isobutane	۸A	N		na	ΝA	9.52E+05		па
1-Butene/Isobutylene (115-11-7)	5.39E-03	NV		na	1.73E-01	6.87E+06	2.52E-08	2
1,3-Butadlene/butane	NA	3.74E-03		na	NA	2.20E+04		na
cis-butene	ΑΝ	N		na	۷V	1.72E+04		na
1-Butyne	AA	N		na	ΑN	NA		na
trans-Butene	V	N	-	na	Ą	1.72E+04		na
2-Butyne (crotonylene)	Ϋ́	N		ทล	Y.	NA		na
n-Pentane	Ϋ́	N		na	Ϋ́	1.80E+06		na
n-Hexane	2.94E-03	2.10E+02	1.40E-05	no	9.47E-02	5.28E+05	1.79E-07	on
Dioxins/Furans								
2378-Tetrachlorodibenzo-p-dloxin	NA	4.48E-08		na	ΑN	3.50E+00		na
12378-Pentachlorodibenzo-p-dloxin	NA	NV		na	NA	2.50E+00		na
123478-Hexachlorodibenzo-p-dioxin	NA	NV		na	ΝΑ	NA		na
123678-Hexachlorodibenzo-p-dloxin	NA	NV		na	ΑN	1.50E+01		ยน
123789-Hexachlorodibenzo-p-dloxin	NA	1.48E-06		na	NA	AN		ua
1234678-Heptachlorodibenzo-p-dloxin	NA	N		na	NA	NA .		na
OCDD	2.61E-10	≥ N		na	8.40E-09	1.50E+02	5.60E-11	ou
2378-Tetrachlorodibenzo-p-furan	NA	NV		na	NA	2.00E+00		na
12378-Pentachlorodibenzo-p-furan	NA	NV		na	NA	AN		na
23478-Pentachlorodibenzo-o-furan	NA	₽		na	AN AN	7.50E-02	-	na

		Cartridge,	5.58-mm	Blan	k. M200 (N	Cartridge, 5:56-mm Blank, M200 (M16A2 Rifle)		ſ
	\$ 1 \$ 2 \$		00	DIC	DODIC: A080	(2)	•	
,		Health-Based						
Compound	(hg/m³)	Screening Level (µg/m³)	Cehronic/ HBSL	> 17	Cacute (µg/m³)	Acute Toxicity Value (µg/m³)	Cacute/ ATV	> 12
123478-Hexachlorodihenzo n func								
123678-Hexachlorodihenzo a Green	XX.	≥		na	AN	7.50E+00		2
123789-Heverhorothoroth	¥	≩		na	ΑN	2.50E+00		3 2
234879 Howard Comment	¥.	≩		na	Ϋ́	AN		2 2
234010-nexacritorogipenzo-p-luran	¥	⋛		2	Ą	1 505100		<u> </u>
1234678-Heptachlorodibenzo-p-furan	AN	≥N		2	N N	1.300-100		e e
1234789-Heptachlorodibenzo-p-furan	Ψ¥	≥			٤	¥		па
OCDF	AM	N			Š.	ΨŽ		na
Permanent Gases					¥	3.00E+02		na
Ammonia (NH3)	NA	1.04E+02		٤				
Carbon Dioxide (CO2)	2.75E+01	N.		5 6	200	1.75E+04		па
Carbon Monoxide (CO)	3.41E+01	1.00E+04	3.44E.02		0.04E+02	5.40E+07	1.64E-05	2
Oxides of Nitrogen (as NO)	1.58E+00	1.00E+02	1 58E 02		E.14E+02	2.30E+05	1.19E-03	2
Sulfur DloxIde (SO2)	1.57E-02	8.00F+01	1 ORE 04	┸	3.09E+01	3.08E+04	1.66E-03	no
VOCs			1.005-04	2	1.205-01	7.89E+02	1.60E-04	5
Propene	1.28E-02	R		Ş	100			
Dichlorodifluoromethane	5.93E-06	2 NOF+02	2 845 00		1.035-01	ΑZ		na
Chlorodifluoromethane	ΔN	E 44E+04	4.04E-U0	2	1.91E-04	1.48E+07	1.29E-11	2
Freon 114	ΔN	3.1 IE+04		g	¥	4.41E+06		БĒ
Chloromethana	90 300 0	ANI		na	ΑĀ	2.10E+07		2
Vinvi Chlorida	9.30E-UD	1.0/E+00	8.72E-06	2	6.98E-04	2.06E+05	3,39E-09	2
1 3.Rutadiana	Υ <u>ν</u>	2.20E-02		na	ΑN	1.28E+04		2
Bromomethene	1.30E-U4	3.74E-03	3.65E-02	no	2.56E-03	2.20E+04	1.16E-07	2
Chloroghana	¥2	5.21E+00		na	ΑN	5.82E+04		2 2
Dichlorofluoromethan	¥ S	2.32E+00		na	Ϋ́	2.64E+06		2 2
Trichloroffinoromethana	77.7	2.09E+02		na B	AN	1.48E+07		2
Pentana	I. IZE-US	7.30E+02	1.54E-08	2	3.61E-04	2.81E+06	1.29E-10	2
Acrolein	1 30E-02	VN 200 C	1000	Ē	≨	1.80E+06		na
1,1-Dichloroethene	NA	Z.UBE-UZ E 24E±02	0.00E-01	2	1.12E-01		4.85E-04	2
Freon 113	AN	3 125 104		g	¥	7.92E+04		Вп
Acetone	AN	2.655.404		ē	Ϋ́	9.58E+06		na E
Methyl lodide	AN	S.O.SETUZ		2	¥	2.37E+06		БП
Carbon Disulfide	1 91F-03	7 305400	2000	밀	ΨV	1.45E+05		na
Acetonitrile	1 81E-02	8 20E+02	4.02E-Ub	2	6.16E-02		1.98E-06	2
3-Chloropropene	NAN	1 045401	Z.87E-U4	2	5.81E-01		5.76E-06	2
Methylene Chloride	3 69E-03	4 00E+00	1,00	ē	ΨN			БП
tert-Butyl Alcohol	AM	4.09E+00	9.04E-04	2	6.93E-02		9.96E-08	2
Acrylonitrile	1.89F-03	2 83E 02	20 700	ē	ΑN			na
trans-1,2-Dichloroethene	AM	7 305-04	0./UE-UZ	2	3.55E-02		1.64E-06	2
Methyl t-Butyl Ether	ΔN	2 425.03		2	Y Y	4.95E+04		ē
		9.10ETU3		ē	Ψ¥	4.32E+05		na

		(1		CILCI			
, , , , ,		non	DODIC: A080	080			
C _{chronic} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronle} / HBSL	> 12	Cacute (µg/m³)	Acute Toxicity Value (µg/m³)	Cacute/ ATV	> 12
1.47E-02	2.09E+02	7.04E-05	2	4.72E-01	5,28E+05	8.94E-07	2
ΝΑ	5.21E+02		E	¥	7.92E+04		na
NA	2.09E+02		Ba	Ϋ́	1.92E+04		na
Y.	3.65E+01		na	٩N	7.92E+05		g
1.09E-04	1.04E+03	1.05E-07	ဥ	3.52E-03	8.85E+05	3.98E-09	2
8.50E-04	3,29E+03	2.59E-07	ou	2.74E-02	1.44E+06	1.90E-08	ou
NA	1.10E+02		na	NA	NA		na
NA	8.35E-02		na	Y V V	9.76E+03		na
NA	1.04E+03		na	NA	1.94E+06		na
NA	1.28E-01		na	NA	1.28E+05		na
3.52E-04	7.39E-02	4.76E-03	u0	2.64E-02	8.08E+03	3.27E-06	uou
1.81E-02	2.49E-01	7.25E-02	no	3.39E-01	1.56E+05	2.17E-06	2
NA	N\		na	NA	3.50E+05		na
NA	N\		na	NA	1.80E+06		na
NA	1.04E+03		na	NA	1.94E+06		na
NA	1.40E-01		пa	¥	6.14E+04		Б
AN	9.89E-02		BE	¥	5.08E+05		na
¥	7.30E+02		na	Ϋ́	4.09E+05		밀
Ϋ́	3.65E+01		na	¥	2.50E+05		2
Ϋ́	6.11E-01		na	ΑĀ	9.00E+04		E
NA	1.08E-01		na	NA			
2.45E-04	8.34E+01	2.94E-06	<u>Б</u>	7.89E-03		2.57E-08	2
6.24E-03	4.02E+02	1.55E-05	on O	5.02E-02		2.68E-07	1
¥Ν	≥		B	¥	ΨŽ		E
¥	5.17E-02		В	¥	¥		na
¥	3.29E+02		g	¥	٧¥		na
¥	1.20E-01		na	¥	1.64E+05		g
ΑĀ	3,31E+00	٠	na	¥	6.78E+05		2
NA	5.11E+00		na	≨	4.09E+04		na
NA	8.00E-02		na	Ϋ́	6.00E+03		na
NA	8.73E-03		па	¥	1.54E+05		ua
NA	6.21E+01		na	NA			eu
AN	2.60E-01		na	۸			ua
1.31E-04	1.06E+03	1.24E-07	9	4.21E-03		7.76E-09	ou
3.60E-04	7.30E+02	4.94E-07		1.16E-02		1.78E-08	
6.70E-05	7.30E+02	9.18E-08		2.16E-03		3.31E-09	2
5.76E-04	1.06E+03	5.44E-07	ဥ	4.63E-03		2.17E-08	2
NA	1.75E+00		g	¥	6.20E+03		na
¥	4.02E+02		Ba	AN	2.46E+05		па
	1.47E-02 NA	┈┈┫╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎╎ ┼┼┼┼┼┼┼┼┼┼┼┼┼	Screening Level (µg/m³) 2.09E+02 2.09E+02 2.09E+02 2.09E+03 3.65E+01 1.04E+03 1.10E+02 8.35E-02 1.04E+03 1.10E+02 8.36E+01 NV NV NV NV 1.04E+03 1.28E-01 2.49E-01 2.49E-01 4.02E+02 3.65E+01 6.11E-01 1.06E+03 1.20E-01 3.31E+00 8.00E-02 8.73E-03 6.21E+01 2.60E-01 1.06E+03 1.76E+00 8.00E-02 1.06E+03 1.76E+00 8.00E-02 1.06E+03 1.76E+00 8.00E-02 1.06E+03 1.76E+00 8.00E-02 1.06E+03 1.76E+00	Screening Level Cehronic* (µg/m³) HBSL 2.09E+02 7.04E-05 5.21E+02 1.04E-03 2.09E+02 1.05E-07 3.29E+03 2.59E-07 1.04E+03 1.05E-07 1.04E+03 2.59E-07 1.04E+03 1.25E-02 1.04E+03 1.25E-02 1.04E+03 1.25E-02 1.04E+03 1.25E-02 1.04E+03 1.26E-03 2.49E-01 7.25E-02 1.04E+03 1.06E-03 1.06E+01 1.06E-05 1.06E+02 1.55E-05 NV 1.06E-05 1.06E-01 1.55E-05 1.20E-01 1.20E-05 1.20E-01 2.60E-07 2.60E-07 1.06E+03 1.06E+03 1.24E-07 1.75E+00 1.75E+07 1.75E+00 1.75E+07	Screening Level Cehronic Per 1 717 (µg/m³) 1.04E-02 na 2.09E+02 7.04E-05 na 2.09E+02 na 3.65E+01 na 1.04E+03 1.05E-07 no 1.04E+03 2.59E-07 no 1.04E+03 2.59E-07 na 1.04E+03 1.05E-07 na 1.04E+03 1.05E-07 na 1.04E+03 1.05E-07 na 1.04E+03 1.0 na 1.06E+03 1.0 na 3.65E+01 na na 6.11E-01 na na 1.06E+02 na na 2.0E+02 na na 3.29E+02 na na 1.06E+03 1.24E-07<	Screening Level Cennols > 17 (µg/m³) (µg/m³) HBSL NA 4.72E-01 2.09E+02 7.04E-05 no 4.72E-01 5.21E+02 na NA 2.09E+02 na NA 3.65E+01 na NA 1.04E+03 1.05E-07 no 2.74E-02 1.06E+03 na NA 1.04E+03 na NA 3.0E+01 2.94E-06 na NA 3.29E+02 na na NA	Screening Level Perionic > 17 (µg/m³) Value (µg/m³) 2.09E+02 7.04E-05 no 4.72E-01 5.28E+05 2.09E+02 7.04E-05 no 4.72E-01 5.28E+06 2.09E+02 na NA 7.92E+04 2.09E+02 na NA 7.92E+06 3.65E+01 na NA 7.92E+06 3.06E+03 2.59E-07 no 3.52E-03 1.44E+06 1.10E+02 na NA 1.26E+05 1.10E+02 na NA 1.26E+05 1.10E+02 na NA 1.26E+05 1.06E+03 na NA 1.26E+05 NV na NA 1.36E+06 NV na NA 4.06E+05 NV na NA 4.06E+05 1.08E-01 na NA 1.36E+06 6.11E-01 na NA 1.36E+05 A.02E+02 na NA 1.36E+05 A.02E+01

		Cartridge,	5.58-mm	Blan	k, M200 (n	Cartridge, 5.56-mm Blank, M200 (M16A2 Rifle)		
			3	<u>ن</u> د	DODIC: A080			
Compound	Cchronic	Health-Based	C			Acute T		L
	(m/grl)	Screening Level	HBSL	× 1~	eman (Velue (m/m3)	Cacute/	> 12
		(m/grl)				(m/Brl) anns (<u> </u>	
1.2.2-letrachioroethane	¥	3.31E-02		2	¥	2.08E+04		
1,2,3-1 richioropropane	₹	9.61E-04		2	AN	B 03E 104		2
Bromobenzene	ΑN	1.04E+01		E	¥	4 82F+04		e l
4-Einylloluene	6.47E-05	≥		2	2 DAE-03	4 2551.04	100	BE
1,3,5-Trimethylbenzene	2.83E-05	6.21E+00	4.55E-06	2 2	0.005.03	1.20=+05	1.67E-08	2
	ΨX	2.56E+02		2 2	9.09E-04	3.08E+U3	2.47E-09	2
1,2,4-Trimethylbenzene	3.79E-05	6.21E+00	R 12E.ng	4	4 22 F	¥2		a
1,3-Dichlorobenzene	ΑN	3.29E+00		2 2	1.42E-U3	1.80E+05	6.78E-09	2
1,4-Dichlorobenzene	AN AN	3.06E-01			Ş S	3.61E+04		па
Benzyl Chloride	ΑN	3 9RF-02			¥.	6.61E+05		na
1,2-Dichlorobenzene	¥	2 09E+02		2	₹ Ž	5.20E+03		na
Hexachlorethane	ΑΝ	4 BOE 04			¥Z.	3.01E+05		na
1,2,4-Trichiorobenzene	AN	2 ORETOS		밀	ĄZ	2.90E+04		na
Hexachlorobutadiene	AN	2.00E+02		<u>e</u>	ΨV	3.71E+04		na
	5	0.73E-02		뾛	۷A	3.21E+04		Ba
SVOCA								
n-nitrosodimethylamine								T
his (2-chlorosth-th-th-th-	₹.	1.37E-04		na	¥	2.50E+03		2
Taring Cally James	NA.	5.82E-03		BE	¥	5.85F+04		₽ 8
loualid	6.86E-04	2.19E+03	3.13E-07	2	2.21E-02	3 85 104	E 74E 07	₽ ;
Z-chlorophenol	ΑN	1.83E+01		E	¥	5.05E+04	3./4E-U/	2
1,3-Dichlorobenzene	NA	3.29E+00		2	ΔN	2,505.103		na
1,4-dichlorobenzene	AN	3.06E-01		2 2	2 4	3.016+04		멸
1,2-dichlorobenzene	ΑN	2.09E+02			\$ 5	9.61E+U5		g
benzył ałcohoł	ΑΝ	1.10E+03		2	2 4	3.01E+05		ē
bis(2-chlorolsopropyl)ether	ΨŽ	1.92E-01		2	\$ 5	5.53E+04		ā
2-methylphenol	ΑΝ	1 83F+02		2 2	¥	6.99E+04		na
hexachloroethane	ΑN	4.80E-01		2 2	¥ 5	AN S		na
n-nitroso-di-n-propylamine	¥	9.61F-04		2	Ž	2.90E+04		Па
4-methylphenol	¥	1.83F+02		<u> </u>	₹ ·	2.00E+02		na
nitrobenzene	¥	2 09E+00		<u> </u>	¥.	νA		na
Isophorone	¥N	7 085100		E	¥	1.51E+04		a
2-nitrophenol	AN	ANY ANY		2	¥ Z	2.83E+04		ē
2,4-dimethylphenol	VN	7 201 .03		na	¥ N	AA		E
bis(2-chforoethoxy)methane		1.30E+U1		na	Ϋ́	ΑA		E
2,4-dichlorophenol	5 5	AN .		E	ΑN	Ϋ́		na
1,2,4-trichlorobenzene	C N	1.10E+01		g	ΑN	3.00E+04		2
naphthalena	3 53E 08	2.00E+02		g	A A	3.71E+04		2
4-chloroanlline	NAM	3.13E+00	1.13E-06	2	1.14E-04	7.86E+04	1.45E-09	2
hexachlorohitadiana	\$ 5	1.4bE+U1		na	AN	3.00E+04		2
	¥ _N	8.62E-02	•	na	¥	3 21F+04		
				1	1		-	

Compound 4-chloro-3-methylphenol 2-methylnaphthalene hexachlorocyclopentadiene 2.4,6-trichlorophenol 2,4,5-trichlorophenol	Cahronic		00 00	DODIC: A080	080			
Compound 4-chloro-3-methylphenol 2-methylnaphthalene hexachlorocyclopentadlene 2,4,8-trichlorophenol 2,4,5-trichlorophenol	Cebronic				il i			
4-chloro-3-methylphenol 2-methylnaphthalene hexachlorocyclopentadlene 2,4,6-trichlorophenol	(hg/m³)	Health-Based Screening Level (µg/m³)	C _{chronlc} / HBSL	> 12	C _{acute} (µg/m³)	Acute Toxicity Value (µg/m³)	Cacute/ ATV	> 12
2-methylnaphthalene hexachlorocyclopentadlene 2,4,6-trichlorophenol 2,4,5-trichlorophenol	¥	ş		na	NA	2.00E+04		na
hexachlorocyclopentadiene 2,4,6-trichlorophenol 2,4,5-trichlorophenol	ΑN	7.30E+01		na	¥	2.00E+04		na
2,4,6-trichlorophenol 2,4,5-trichlorophenol	Α¥	7.30E-02		na	NA	2.23E+02		na
2,4,5-trichlorophenol	ΑN	1.10E+02		na	Ϋ́	3.00E+04		na
	AN	3.65E+02		na	NA	3.00E+04		na
2-chloronaphthalane	ΑN	2.92E+02		na	NA	6.00E+02		na
2-nitroaniline	ΑN	2.09E-01		na	ΑN	NA		па
	AN	N		na	ΝΑ	2.00E+02		na
dimethylphthalate	AN A	3.65E+04		na	NA	1.50E+04		па
2.6-dinitrotoluene	AN	3.65E+00		na	ΑĀ	6.00E+02		na
acenaphthene	ΑN	2.19E+02		na	Ą Z	1.25E+03		밀
3-nitroaniline	NA NA	N/		na	₹	ΨN		E
2.4-dinitrophenol	ΑN	7.30E+00		na	¥	7.50E+03		밀
dibenzofuran	ΑN	1.46E+01		na	Ϋ́	ΑN		2
2,4-dinitrotoluene	Ϋ́	7.30E+00		กล	¥	6.00E+02		Ba
4-nitrophenol	Ϋ́	2.92E+01	,	na	A A	3.00E+04		a L
Fluorene	Ϋ́	1.46E+02		na	A A	7.50E+04		E E
4-chlorophenyl-phenylether	ΑN	ΛV		na	¥	NA		g
diethyiphthalate	Ϋ́	2.92E+03		na	ΑN	1.50E+04		Ba
4-nitroaniline	AN	NN		na	ΨN	9.00E+03		g
4,6-dinitro-2-methylphenof	AN	3.65E-01		ua	ΨN	5.00E+02		g
n-nitrosodiphenylamine(1)	AA	1.37E+00		na	₹ Z	¥		2
4-bromophenyl-phenylether	AN	N		na	ΑN	ΨV		밀
hexachlorobenzene	NA	4.18E-03		na	ΑN	7.50E+01		Ē
pentachtorophenol	NA	5.60E-02		na	ΑN	1.50E+03		밀
phenanthrene	۸A	NV		na	₹	2.00E+03		E
anthracene	ΝA	1.10E+03		na	≨	6.00E+03		밀
dl-n-butyiphthalate	ΑN	3.65E+02		Bu	¥:	1.50E+04		E S
fluoranthene	¥	1.46E+02		na L	¥	3.00E+01		2 2
pyrene	¥	1.10E+02		B	ž	1,500,104		2 2
butylbenzylphthalate	¥Z	7.30E+02		2	2	3.00E+03		<u> </u>
benzo(a)anthracene	¥	2.17E-02		<u>e</u>	¥Z.	6.00E+02	1	E I
chrysene	¥	2.17E+00	-	g	Š	2.00E+02	1	
3,3-dichlorobenzidine	ΑN	1.50E-02		4	NA NA	6.21E+03		4
bis(2-ethylhexyl)phthalate	8.29E-05	4.80E-01	1.73E-04	_	6.22E-03	1.00E+04	6.22E-07	4
dl-n-octylphthalate	NA	7.30E+01		ua	ΑN	1.50E+05		밀
benzo(b)fluoranthene	ΝA	2.17E-02		na	ΑN	ΑΝ		밀
benzo(k)fluoranthene	ΝA	2.17E-01		na	ΝΑ	AN		티
benzo(a)pyrene	ΝA	2.17E-03		na	NA	7.50E+03		2

		Cartridge, 5.56-mm Blank, M200 (M16A2 Rifle) DODIC: A080	.56-mm DOI	nm Blank, M2 DODIC: A080	., M200 (N	116A2 Rifle)		
Compound	С _{сhronic} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chrontc} / HBSL	> 12	Cacute (µg/m³)	Acute Toxicity Value (µg/m³)	Cacute/ ATV	× 12
Indeno(1,2,3-cd)pyrene	۸A	2.17E-02		ē	¥	AN		2
dibenz(a,h)anthracene	ΝA	2.17E-03		2	AN	3 ODE+04		<u> </u>
benzo(g,h,l)perylene	ΑΝ	≥		a	¥	3.00E+04		2 2
TO-13 (PAHs)								
naphthalene	9.61E-04	3 135+00	2 075 04		200			
acenaphthylene	7.76E-05	S - N	3.07 E-04	2 2	3.09E-02		3.93E-07	2
Acenaphthene	5.14E-06	2.19E+02	2.35E-08	2	1 65E-04	4.00E+02	1.25E-05	2
fluorene	1.50E-05	1.46E+02	1.03E-07	2 2	4 82F-04	7 50E+04	1.32E-U/	2
phenanthrene	1.48E-05	N		E	4.75E-04	2.00F+03	0.43E-09	2 2
anthracene	1.59E-08	1.10E+03	1.45E-11	2	5.10E-07	6.00F+03	A 51E-11	2 2
fluoranthene	1.55E-05	1.46E+02	1.06E-07	2	4.99E-04	Π	1 86E-05	2 2
pyrene	2.51E-05	1.10E+02	2.29E-07	2	8.07E-04	Τ	5 38E-08	2 2
benzo(a)anthracene	1.02E-05	2.17E-02	4.71E-04	2	7.68E-04	6.00E+02	1 28F-06	2 2
chrysene	8.95E-06	2.17E+00	4.13E-06	2	6.72E-04	2.00E+02	3.36F-06	2 2
Denzo(b)fluoranthene	1.20E-05	2.17E-02	5.54E-04	2	2.26E-04	ΑN		2 2
Denzo(K)iluoranthene	7.93E-06	2.17E-01	3.65E-05	2	1.49E-04	ΑN		2
Benzo(e)pyrene	2.92E-05	N		na	2.35E-04	¥		2 0
Denzo(a)pyrene	1.10E-05	2.17E-03	5.07E-03	2	8.25E-04	7.50E+03	1.10E-07	1 2
Indeno(1,2,3-cd)pyrene	1.87E-05	2.17E-02	8.61E-04	2	3.50E-04	ΑΝ		2 2
dibenz(a,h)anthracene	2.33E-06	2.17E-03	1.07E-03	2	1.75E-04	3.00E+04	5.82E-09	2
Denzo(g,h,l)perylene	5.13E-05	N		na	1.65E-03	Π	5.50E-08	2 2
Energetics								T
Allicacione 2-Milestella	¥.	2.09E+00		na	AN	1.51E+04		na
2-Mirotoliana	¥ S	3.65E+01		na	¥ Z	AN		na
4-Nirototiene	\$ 2	3.65E+01		E	Ϋ́	٧V		æ
Nitrogycerine	4 2 3 3 3 3 3 3 3 3 3 3	3.03E+U1		na	¥	3.37E+04		na
1.3-Dinitrobenzene	ΔN	7.00E-01		ā	Y.	ΔA		na
2.8-Dinitrotolitene	S AN	3.655.00		Ba	¥	3.00E+03		Б
2 4-Dialtrotolione	2	3.00=+00		ē	Ψ×	6.00E+02		na E
1.3 5. Trinkrohenzene	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7.30E+00		В	ΑN	6.00E+02		na
A A Tribulation	\$ 3	1.10E+02		Ē	Y V V	3.00E+04		Bu
C, T, O' I III III O O I UBITE	¥	2.24E-01		na	NA	2.50E+04		na
A America of Primiting	¥	6.11E-02		na	NA	۸A		na
A A THIRD CAN THE WAY OF THE WAY	¥	2		na	NA	ΑN		na
z-Amino-z,6-Uinitrotoluene	₹	N		na	¥	1.50E+04		E
l etry:	ΨX	3.65E+01		na	ΑN	NA		E
Pontoonthilotheralisate	AN C	1.83E+02		na	ΑA	NA		na
and a supplied and the	NA NA	NS.		na	NA NA	5.00E+01		na
		·						

		Cartridge, 5	.56-mm	Blank	M200 (N	Cartridge, 5.56-mm Blank; M200 (M18A2 Rifle)
			O	DODIC: A080	080	
Compound	C _{chronic} (µg/m³)	Health-Based Screening Level (µg/m³)	C _{chronle} / HBSL	> 12	Cacute (µg/m³)	Acute Toxicity Value (µg/m³
Dibutyl Phthalate	ΝΑ	3.65E+02		па	¥	1.50E+04
Dioctyl Phthalate	ΑN	4.80E-01		na	¥	1.00E+04
Diphenylamine	NA	9.13E+01		ua.	NA	3.00E+04
Footnotes: NA: Not applicable because compound was not detected	s not detected					
na: Not available because health-based sceening value is not available or not applicable if compound was not detected	eening value is no	t avallable or not applic	able If comp	ound w	is not detec	pel
Cehanic: Chronic time-averaged concentration	E					
HBSL: Chronic health-based screening level C _{ecute} : Acute time-averaged concentration ATV: Acute invictivation	-					

> 12

Cacute/ ATV

Acute Toxicity Value (µg/m³) E E E

Table D-4: Comparison of Air Concentrations With Health-Based Values: Total Petroleum Hydrocarbons

200 meter location

	Cartr	Cartridge, 5.56-mm Blank, M200 (M16A2 Rifle)	ink, M200 (M16A2	Riffe)
		DODIC	DODIC: A080	
Compound (a)	C _{chronic} (µg/m³)	C _{chronic} (µg/m³)	С _{сhronic} (µg/m³)	С _{еhronic} (µg/m³)
	Allphatic:C<=8	Allphatic:C>8	Aromatic:C<=8	Aromatic
Acid Gases				O'O'Ilaire
Propylene	1.93E-02	AN	AN	AN
Propyne (methyl acetylene)	3.21E-03	AA	NA	AN
1-Butene/Isobutylene (115-11-7)	5.39E-03	NA	NA	AN
n-Hexane	2.94E-03	NA	NA	NA
Hexane	1.47E-02	NA AA	NA	NA
Benzene	NA	NA	4.21E-02	NA
Toluene	NA	NA NA	6.24E-03	NA
Ethylbenzene	NA	NA	1.31E-04	AN
m&p-Xylene	ΑN	NA	3.60E-04	AN
o-Xylene	AN	NA	6.70E-05	NA
Styrene	NA	NA AA	AN	5.76E-04
4-Ethyltoluene	NA	NA	AN	6.47E-05
1,3,5-Trimethylbenzene	NA	NA	AN	2.83E-05
1,2,4-Trimethylbenzene	NA	NA	NA	3.79E-05
naphthalene	NA	NA	NA	3.53E-06
naphthalene	NA	NA	NA	9.61E-04
acenaphtnylene	ΨV	NA	NA	7.76E-05
Acenaphthene	NA A	NA	NA	5.14E-06
fluorene	NA	NA	NA	1.50E-05
phenanthrene	NA	NA	NA	1.48E-05
anthracene	NA	NA	NA	1.59E-08
fluoranthene	NA	NA	NA	1.55E-05
Total (µg/m³)		0.00E+00	4.89E-02	1.80E-03
Derived Health-Based Screening Level	1.92E+04	1.04E+03	4.17E+02	2.09E+02

D-20

Table D-4: Comparison of Air Concentrations With Health-Based Values: Total Petroleum Hydrocarbons

Cchronic (µg/m³) Aromatic:C>8 8.63E-06 2 Cartridge, 5.56-mm Blank, M200 (M16A2 Rifle) 200 meter location Aromatic:C<=8 Cehronte (µg/m³) 1.17E-04 2 DODÍC: A080 C_{chronic} (µg/m³) Allphatic:C>8 0.00E+00 2 Allphatic:C<=8 Cehronic (µg/m³) 2.37E-06 >12 Cchronic/HBSL Compound (a)

Footnotes:

>1? = 1s the ratio greater than one?

NA = Not Applicable because compound was not detected

Cehronic = chronic averaged air Concentration

HBSL = Health-Based Screening Level

APPENDIX E

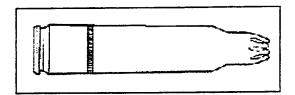
FACT SHEET SUBMITTED TO THE U.S. ARMY ENVIRONMENTAL CENTER

U.S. Army Environmental Center Training Munitions Fact Sheet

M200 5.56-mm Blank Cartridge

Department of Defense Identification Code: A080

Breathing air emissions from the M200 5.56-mm blank cartridge will not impact the health of residents who live as close as 200 meters (656 feet) from the firing location.



To be fully prepared to protect our country, U.S. soldiers must train with many different weapons and munitions, including the M200 5.56-mm blank cartridge. This training is important because it helps prepare our soldiers for a variety of combat situations. While the Army recognizes the value of such comprehensive training on our installations, we also work hard to ensure the safety and health of surrounding communities.

WILL BREATHING AIR EMISSIONS FROM THE M200 5.56-MM BLANK CARTRIDGE AFFECT MY HEALTH?

To answer this question, the U.S. Army tested the air emissions that are released when the M200 is fired. The information gathered during these tests was then analyzed to determine if there would be a potential for health effects from inhalation to residents who live near training areas. Study results, generated using conservative methods, showed that offsite residents breathing air as close as 200 meters (656 feet or about the length of two football fields) from the firing location are safe from these emissions. If offsite residents are located less than 200 meters from the firing locations, a more site-specific evaluation would be necessary. It should be noted that at most locations, training areas are at least 1,000 meters (over half a mile) away from populated areas and the distance to firing locations may be even farther.

HOW WAS THE STUDY CONDUCTED?

To gather data for this study, the M200 was fired from the M16A1 rifle in a test chamber. The air in the chamber was then tested to identify the types and amounts of substances released. About 300 different substances were looked for during this part of the study.

This information was then used in an U.S. Environmental Protection Agency (USEPA) approved air model (a computer program that allows estimation of air concentrations) to determine the amount of each substance to which someone

living near a training site might be exposed. Downwind concentrations were estimated based on a typical use scenario for the M200 during training exercises. Since this study did not look at any one specific training area, the assumptions used in the model would, in most cases, predict higher downwind air concentrations than those expected at an actual training site.

These estimated air concentrations were then compared to screening levels established by the USEPA and other federal agencies. If the air concentrations are less than these screening levels, they are considered safe for the general population, including sensitive people such as the sick, elderly, and children.

WHAT ARE THE STUDY LIMITATIONS?

Many steps were taken to ensure that the results of this study are protective of residents who live near training facilities. However, as with any study, this study has limitations. For example, the study does not consider exposure to other types of munitions that could also be used during the same training event. Due to these limitations, conservative model conditions were used to ensure the protection of public health from breathing M200 air emissions.

WHAT EXACTLY IS THE M200 5.56-MM BLANK CARTRIDGE?

The M200 is a blank cartridge used only in training. It has no projectile and is used to simulate firing in training exercises and for saluting purposes, such as the 21-gun salute at military funerals. To use the M200, a device is attached to the muzzle of the rifle to allow for firing of blank ammunition. The M200 consists of a metal case containing mostly copper and zinc. The propelling charge is made up primarily of nitrocellulose and nitroglycerine. Nitrocellulose is commonly used in furniture lacquers, printing inks, nail polish, and as a primary ingredient in smokeless propellants for military and commercial use. Nitroglycerin is a component of dynamite and is used for military and industrial purposes such as mining and demolition. The M200 can be identified by its crimped closure at the violet-colored cartridge tip.

WHERE CAN I GET MORE INFORMATION?

For more information on the M200 or other military munitions, please call the Army Environmental Hotline at 1-800-USA-3845, visit our Web site at www.aec.army.mil, or e-mail <u>t2hotline@aec.apgea.army.mil</u>.